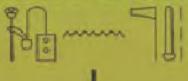
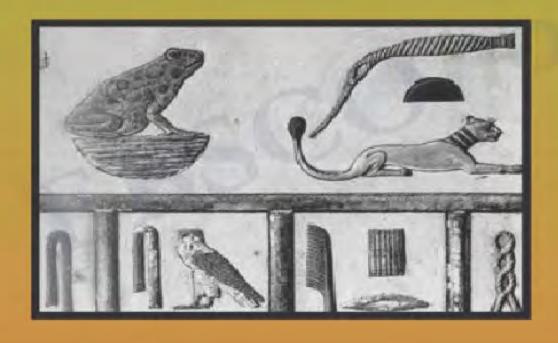
Leo Depuydt

FUNDAMENTALS of

EGYPTIAN GRAMMAR



Elements



A FROG PUBLISHING

Norton · Massachusetts 2012 THIS IS AN INTRODUCTION to Middle Egyptian, spoken in ancient Egypt around 2000 B.C., also called Classical Egyptian. Scribes imitated it long after Egyptian had further evolved. Egyptian was *both* written *and* spoken from *ca.* 3000-2500 B.C. to *ca.* A.D. 1000-1500, for nearly 4000 years. The language changed much in this time. Several stages are distinguished. Middle Egyptian, the second, is traditionally studied first. This textbook is perhaps more suitable for an intensive course, the kind used to teach other languages that differ much from English, such as Chinese, Japanese, Korean, Russian, Swahili, and Turkish. But there is enough material for any kind of course or for self-teaching.

This work is organized in two ways: first, in chapters and sections by subject matter; and second, in thirty-six lessons with questions and exercises for teaching and learning. There are five chapters, entitled "The Hieroglyphic Script," "Substantives and Adjectives," "Pronouns and Adverbs," "Non-verbal Sentences," and "Verbal Coordinates."

This book is fully self-sufficient. It contains all the necessary vocabulary, a full answer key to all the exercises, a list of all the hieroglyphic signs that occur, and definitions of all the grammatical terms. There is also an index of passages cited from Egyptian texts and an index of grammatical topics. The story of the decipherment is told in an appendix.

Middle Egyptian is written with the hieroglyphic script. For all its beauty, this script does not represent the language in full. Thus, vowels are not denoted. Studying Middle Egyptian is an unusual endeavor. This book is therefore also unusual as an introduction. Much emphasis is placed on analysis. In fact, this book is not only a textbook, but also an analysis of the fundamentals of Middle Egyptian cast in a textbook mold for clarity and distinction. The analysis progresses from the most basic elements to ever increasing complexity by simple and obvious incremental steps. In light of this logical progression, Part 1 is called "Elements." Part 2 will be called "Links." No prior knowledge of grammar or of any theory of language is presupposed. Grammatical terms are used parsimoniously.

This work is much inspired by the writings of H.J. Polotsky and by a decade of teaching Yale, Brown, and Harvard students. For anyone interested, 18 theses discussed in the Preface and defended in detail elsewhere convey some of what lends this grammar its own character.

(*Update of 2012*) Engagement with the original edition of 1999 by the author and others have produced only little need for change. This reissue is therefore characterized as a "reprint with minor corrections and additions." A detailed list of all the changes is provided for the benefit of owners and users of the original edition. Reflections on a review of the original edition and on what lies beyond the "elements" of Middle Egyptian grammar are also offered. Meanwhile, learning the elements of Middle Egyptian using this textbook leaves one free to imagine the verbal system according to any theory that might strike one's fancy.

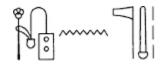
FUNDAMENTALS of EGYPTIAN GRAMMAR

I ELEMENTS

Leo Depuydt



FUNDAMENTALS of EGYPTIAN GRAMMAR



I Elements

Reprint with Minor Corrections and Additions

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Trog Publishing was founded in 1999 in Cambridge, Mass. It is named for two facts. First, "de puydt" meant "the frog" in Middle Dutch. It still does in West-Flemish and other Flemish dialects of Dutch. As a family name, it is pseudo-etymologically derived from French *Dupui(t)s* "from (that is, living at) the well." Second, p3 qrr (pah KErer)

63) and (Topographical Bibliography, III².2, 806; r written with lion). Greek-speaking Egyptians pronounced it Pokrouris or the like. A Coptic form is Pekrour. It is not clear in how many languages besides Flemish and Egyptian a person can be named Frog. For example, Sanskrit manduka "frog" is used as a name. But in no script other than hieroglyphic writing can the name be written with lions (leo). It is otherwise a coincidence that the author is an Egyptologist and grew up in Merkem, West-Flanders.

Printed in the United States of America on acid-free paper

To the Memory of

Germaine Leeman (Merkem 10/28/1925 - Merkem 5/4/2007)

Frans Depuydt (Merkem 3/22/1925 - Merkem 7/20/2009)

Mother and Father

Hieroglyphs on front cover and title-page:

See pages 7-8 § 1.4.

Front cover photo:

Detail from the slab-stela of Wp m nfrt "Wepem-nofret," dated to ca. 2600 B.C.E. and kept at the Phoebe A. Hearst Museum of Anthropology, formerly the Robert H. Lowie Museum of Anthropology, in Berkeley, California, "the best preserved example of Old Kingdom [ca. 2700-2100 B.C.E.] painted low relief" according to W. Stevenson Smith (Archaeology 16, 1963, 3).

Discovered in 1905 near the pyramids of Giza by the Hearst Expedition of the University of California, directed by George A. Reisner.

Photograph by W. Kelly Simpson, from W.S. Smith, *The Art and Architecture of Ancient Egypt*, third edition, revised by W.K. Simpson, New Haven: Yale University Press 1998, p. 45.

TABLE OF CONTENTS

PREFACE

FOUNDATIONS

What is the Standard Theory?

Special Standard Theory and General Standard Theory

Sentence Type and Verb Form:

EIGHTEEN THESES

Thesis 1: On the Structure of Hieroglyphic Writing and the Dual Structure of Language

Thesis 2: On the Dual Structure of Language and the Definition of the Sentence Types

Thesis 3: On the Need to Distinguish between Fact and Inference

Thesis 4: On the Exclusion of Subject and Predicate, Topic and Comment, and Theme and Rheme from This Grammar

Thesis 5: On Isolating Contrast and Distinctive Contrast as Empirical Phenomena

Thesis 6: On the Crucial Role of the Link between Sentence Type and Verb Form and on "Substantival," "Adjectival," and "Adverbial" as Bridge Notions between the Two

Thesis 7: On the Distinct Character of Sentences *with* Isolating Contrast and Sentences *without* Isolating Contrast and on Applying this Observation to the Treatment of the Substantival Sentence

Thesis 8: On the True Purpose of the Question Test in Analyzing Substantival Sentences: to Identify Isolating Contrast when Present

Thesis 9: On the Coordinates of Verb Forms

Thesis 10: On the Distinction between Two Levels, Generic Verb Forms and Specific Verb Forms

Thesis 11: Towards a Complete Codification of the Arrangements Characterizing Visible Elements of Sound Pattern in the Verbal System

Thesis 12: On the Substantive and What Is Substantival as Expressions of *One* Thing as opposed to the Adjective and What is Adjectival as Expressions of *Two* Things

Thesis 13: On Absence of a Pause as an Inferred Empirical Marker of Adverbiality

Thesis 14: On One Case in Which the Stative Might not Seem to Denote a State and on Contiguity as the Explanation as to Why it Does Anyhow

Thesis 15: On \bigvee jw as a Particle Referring to the Speaker at the Place and the Time of Speaking

Thesis 16: On Contingent Verb Forms and the Distinction between Condition and Premise

Thesis 17: On Saying as Little as Possible about Aspect

Thesis 18: On the Omission of the Distinction between Morphology and Syntax

ORGANIZATION

SCOPE AND GENRE OF THIS GRAMMAR

SUNDRY REMARKS

ACKNOWLEDGMENTS

ABOUT THIS REPRINT

Comparison of This Reprint with the Original Edition

List of Differences with the Original Edition of 1999

Remarks on a Review of the Original Edition

Middle Egyptian Grammar beyond the "Elements"

INTRODUCTION: EGYPTIAN LANGUAGE AND SCRIPT

- 1. The Egyptian Language
- 2. Hieroglyphic Writing
- 3. The Waning of Egyptian

Questions

Lesson 1 (§§ 1.1-21, pp. 7-16)

CHAPTER ONE: THE HIEROGLYPHIC SCRIPT

- 1. The Hieroglyphic Writing System
 - a. Egyptian Language and Hieroglyphic Script
 - b. Hieroglyphs Referring to What They Depict and Hieroglyphs Referring to Sound
 - c. The Structure of Words
 - d. Two Ways of Putting Words into Writing
 - e. Ideograms
 - f. Ideograms as Logograms
 - g. Phonograms (Sometimes as Logograms)
 - h. From Ideograms to Phonograms: Rebus Writing

Questions

Lesson 2 (§§ 1.22-26, pp. 17-28)

2. Uniliteral Phonograms and the Sounds of Egyptian

Questions

Exercises in Transcribing Uniliteral Phonograms (the "Alphabet")

Lesson 3 (§§ 1.27-29, pp. 29-39)

3. Biliteral Phonograms

Exercises in Transcribing Biliteral Phonograms

Lesson 4 (§§ 1.30-33, pp. 40-44)

- 4. Triliteral Phonograms
- 5. Phonograms Used as Phonetic Complements

Exercises in Transcribing Biliteral and Triliteral Phonograms

Lesson 5 (§§ 1.34-48, pp. 45-56)

- 6. Determinatives
- 7. The Hieroglyphic Writing System: A Survey
- 8. Types of Hieroglyphs Viewed as Functions
- 9. Monograms
- 10. Writing without Vowels
- 11. Orthography or Spelling
 - a. Definition
 - b. Variation in Spelling

Ouestions

Exercise on Variation in Spelling

Lesson 6 (§§ 1.49-55, pp. 57-63)

- c. Unusual Spellings: Abbreviations and Transpositions
- 12. Hieroglyphic Layout
- 13. Concluding Remark

Questions

Exercise on Transpositions and Abbreviations

Exercise on Locating Signs in the Sign-List on pp. 691-732 by Letter and Number

BEFORE BEGINNING THE STUDY OF THE LANGUAGE

Lesson 7 (§§ 2.1-14, pp. 67-72)

CHAPTER TWO: SUBSTANTIVES AND ADJECTIVES

1. Word, Sentence, Clause, Phrase

- 2. The Structure of Words
 - a. Vowels
 - b. Number of Consonants
 - c. The "Weak" Consonants (y and w)
- 3. Types of Words

Questions

Lesson 8 (§§ 2.15-29, pp. 73-88)

- 4. Substantives
 - a. Substantive or Noun
 - b. Gender and Number
 - c. Singular Forms
 - d. Plural Forms
 - e. Dual Forms
 - f. Survey of Gender and Number Endings
 - g. Countables and Non-countables
 - h. False Plurals

Questions

CORE VOCABULARY: SUBSTANTIVES

Transcription and Translation Exercise, English to Egyptian

Lesson 9 (§§ 2.30-37, pp. 89-95)

- 5. Substantival Phrases
 - a. Phrase
 - b. Substantival Phrase
 - c. Genitival Phrase ("Of")
 - d. Appositional Phrase

Ouestions

Identification of Words, Sentences, Clauses, and Phrases

Transcription and Translation Exercise, English to Egyptian

Lesson 10 (§§ 2.38-45, pp. 96-104)

- 6. Excursus: On Fact and Inference
- 7. Adjectives
- 8. Abstract and Specific "It"

CORE VOCABULARY: ADJECTIVES

Questions

Transcription and Translation Exercise, English to Egyptian

Lesson 11 (§§ 2.46-69, pp. 105-23)

- 9. Relational Adjectives (or "Nisba" Adjectives)
 - a. Form or Sound Pattern
 - b. Meaning or Concept
 - c. Examples
 - d. Gender and Number Endings
 - e. Masculine Singular Relational Adjective and Dual Form of a Feminine Substantive
 - f. The Double Feminine Ending of Relational Adjectives Derived from Feminine Substantives
- 10. "Every," "All"
- 11. "Other"
- 12. Adjectival Phrases: The "Beautiful of Face" Phrase
- 13. "And" and "Or"

Questions

Transcription and Translation Exercise, English to Egyptian

Lesson 12 (§§ 3.1-25, pp. 125-41)

CHAPTER THREE: PRONOUNS AND ADVERBS

- 1. Pronouns
- 2. Personal Pronouns
 - a. Person, Gender, Number Words
 - b. The Three Types of Personal Pronouns: Suffix, Dependent, Independent
 - c. The Eight Combinations of Person, Gender, and Number
 - d. Suffix (Personal) Pronouns

Attached to Substantives ("My")

Attached to Prepositions ("Me")

Attached to Verbs ("I")

Remarks

e. Dependent (Personal) Pronouns

Following Verbs ("Me")

Following Particles ("I")

Following Adjectives ("I")

اے st "It"

f. Independent (Personal) Pronouns

Questions

Transcription and Translation Exercise, English to Egyptian

Lesson 13 (§§ 3.26-33, pp. 142-46)

3. Demonstrative Pronouns

Ouestions

Transcription and Translation Exercise, English to Egyptian

Lesson 14 (§§ 3.34-45, pp. 147-54)

- 4. Adverbs
- 5. Adverbial Phrases
- 6. Prepositions
- 7. Prepositional Phrases
- 8. Compound Prepositions

CORE VOCABULARY: ADVERBS AND PREPOSITIONS

Questions

Transcription and Translation Exercise, English to Egyptian

Lesson 15 (§§ 3.46-73, pp. 155-79)

- 9. Prepositional Adjectives
 - a. Meaning and Form
 - b. The Usages of Prepositional Adjectives
 - c. The Preposition in Prepositional Adjectives
 - d. More on the Preposition in Prepositional Adjectives
 - e. The "Inverted" Use of Prepositional Adjectives



g. Prepositional Adjectives Derived from Compound Prepositions

10. "Entire"

Questions

Transcription and Translation Exercise, English to Egyptian

Transcription and Translation Exercise, Egyptian to English

Vocabulary for the Previous Exercise

Notes to the Vocabulary

Lesson 16 (§§ 4.1-10, pp. 181-86)

CHAPTER FOUR: NON-VERBAL SENTENCES

I. Description of the Four Non-verbal Sentence Types

- 1. Sentence Types
- 2. Concept and Pattern of Sentence Types
- 3. The Core of Sentence Types
- 4. Paradigms

Questions

Lesson 17 (§§ 4.11-55, pp. 187-213)

- 5. The Substantival Sentence
 - a. Concept
 - b. Patterns 1, 2, and 3
 - c. \square p_w as an Enclitic Word
 - d. Uses of Pattern 1
 - e. Pattern 3 as an Extension of Pattern 2
 - f. Order of the Members in Patterns 2 and 3 without Isolating Contrast
 - g. Order of the Members in Pattern 1 without Isolating Contrast
 - h. Isolating Contrast
 - i. Isolating Contrast in Substantival Sentences
 - j. Substantival Sentences of Pattern 2 with Isolating Contrast
 - k. Substantival Sentences of Pattern 3 with Isolating Contrast
 - 1. Interpreting Instances of Pattern 3
 - m. Instances of Pattern 3 with Isolating Contrast on the Second Entity, and Their Relation to Pattern
 - n. Patterns 1, 2, and 3 in Substantival Sentences without Isolating Contrast
 - o. Other Uses of Pattern 3, Possibly with Isolating Contrast
 - p. Apposition in the Substantival Sentence

Ouestions

Transcription and Translation Drill, English to Egyptian

Transcription and Translation Exercise, Egyptian to English

Transcription and Translation Exercise, English to Egyptian

Lesson 18 (§§ 4.56-67, pp. 214-23)

- 6. The Adjectival Sentence
 - a. Concept
 - b. Pattern
 - c. The Adjective in Sentence and Phrase
 - d. Comparative Degree

Ouestions

Transcription and Translation Drill, English to Egyptian

Transcription and Translation Exercise, Egyptian to English

Transcription and Translation Exercise, English to Egyptian

Lesson 19 (§§ 4.68-82, pp. 224-33)

- 7. The Adverbial Sentence
 - a. Concept
 - b. Pattern

c. The Meaning of $\frac{1}{\sqrt{N}} \frac{1}{\sqrt{N}} mk$

d. The Meaning of $\bigvee_{jw} j_w$

8. The Existential Sentence ("There Is")

Questions

Transcription and Translation Drill, English to Egyptian Transcription and Translation Exercise, Egyptian to English Transcription and Translation Exercise, English to Egyptian

Lesson 20 (§§ 4.83-108, pp. 234-48)

II. Three Modifications to Sentences: Ask, Deny, Nuance

- 1. Questions
 - a. Specification and Corroboration
 - b. Questions for Specification Asking for Entities
 Independent and Referring to Persons or Things
 Independent and Referring to Things Only
 Dependent and Referring to Persons or Things
 "Who Are You?"
 - c. Questions for Specification Asking for Circumstances
 - d. Questions for Corroboration



- e. Particles in Questions
- f. Rhetorical Questions

Questions

Transcription and Translation Drill, English to Egyptian Transcription and Translation Exercise, Egyptian to English Transcription and Translation Exercise, English to Egyptian

Lesson 21 (§§ 4.109-34, pp. 249-63)

- 2. Negation
 - a. Negation Words
 - b. Negated Substantival Sentences: ... \
 - c. Negation of Adjectival Sentences
 - d. Negated Adverbial Sentences: nn
 - e. Negated Existential Sentences ("There is Not," "There is No")
- 3. Particles and Interjections
 - a. Particles
 - b. Non-enclitic Particles
 - c. Enclitic Particles
 - d. On the Meaning of Particles
 - e. "Yes" and "No"
 - f. Interjections

Questions

Transcription and Translation Drill, English to Egyptian

Transcription and Translation Exercise, Egyptian to English

Transcription and Translation Exercise, English to Egyptian

Lesson 22 (§§ 4.135-97, pp. 264-300)

III. Sentence Types in Complementary Distribution

- 1. Substantival, Adjectival, Adverbial, and Existential Sentences in Complementary Distribution: To Express Possessive Relationships
 - a. Possessive Relationships
 - b. Possessive Relationships on the Level of the Phrase

Neither possessor nor possession are personal pronouns ("my sister's house")

Only the possessor is a personal pronoun ("her house")

Only the possession is a personal pronoun ("my sister's")

Both possessor and possession are personal pronouns ("hers")

- c. Possessive Relationships on the Level of the Sentence
- d. Substantival Sentences with *nb* "Owner of" Expressing Possessive Relationships
- e. Adjectival Sentences with n(y) "Belonging to" Expressing Possessive Relationships Neither possessor nor possession are personal pronouns ("the house is my sister's")

Only the possessor is a personal pronoun ("the house is hers")

Paradigm A (Singular Only)

Paradigm B (Singular Only)

Paradigm A and Paradigm B Mixed

Paradigm B without $\bigvee_{jm} \bigvee_{jm,j} \bigvee_{jmjj}$?

A Third Paradigm?

Only the possession is a personal pronoun ("it belongs to my sister")

Both possessor and possession are personal pronouns ("it is hers")

f. Adverbial Sentence with "" to" Expressing Possessive Relationships

Neither possessor nor possession are personal pronouns

Only the possessor is a personal pronoun

Only the possession is a personal pronoun

Both possessor and possession are personal pronouns

- g. Existential Sentences Expressing Possession ("He Has No")
- h. Survey of Possessive Relationships (Selective)

Questions

Transcription and Translation Drill, English to Egyptian

Transcription and Translation Exercise, Egyptian to English

Transcription and Translation Exercise, English to Egyptian

Lesson 23 (§§ 4.198-231, pp. 301-28)

- 2. Substantival and Adverbial Sentences in Complementary Distribution: To Associate Entities
 - a. Permanent and Transient Associations
 - b. Permanent Association: Substantival Sentence
 - c. Transient Association: Adverbial Sentence wit 4m "in
 - d. The Same Association Either Permanent or Transient
 - e. Future Transient Associations: Adverbial Sentence with $rac{1}{2}$ "toward"
- 3. Adverbial and Existential Sentences in Complementary Distribution: To Associate Entities and Circumstances
 - a. Indefinite Entities and Definite Entities
 - b. Associating Indefinite and Definite Entities with Circumstances
 - c. Inconsistency in Middle Egyptian

- d. nn: Adverbial or Existential Sentence?
- e. nn in Possessive Constructions

IV. Word Order

- 1. Four Clusters of Rules
- 2. Enclitic Words
 - a. Properties of Enclitic Words
 - b. Enclitic Pronouns and Enclitic Particles
 - c. Enclitic Pronouns
 - d. Enclitic Particles
 - e. Combinations of Enclitic Words
 - f. Presence and Absence of Bonds

Questions

Transcription and Translation Drill, English to Egyptian

Transcription and Translation Exercise, Egyptian to English

Transcription and Translation Exercise, English to Egyptian

Vocabulary for the Exercises in Chapter Four

Notes to the Vocabulary

APPENDIX TO CHAPTER FOUR: A NOTE ON TERMINOLOGY

Lesson 24 (§§ 5.1-38, pp. 331-47)

CHAPTER FIVE: VERBAL COORDINATES

Introduction

- 1. The Verb
- 2. The Verb Form
- 3. Verb Forms and Their Coordinates
- 4. The Eight Dimensions
- 5. Primary, Intermediate, Final Coordinates
- 6. Relations between Dimensions
- 7. Referring to Verb Forms
- 8. Fact and Inference and the Size of the Verbal System
- 9. The Principle of Parallelism
- 10. "Choosing" Coordinates

Questions

Lesson 25 (§§ 5.39-73, pp. 348-65)

I. The First Dimension: Sound Pattern Class of the Root

- 1. Roots of Verbs, Stems of Verb Forms
- 2. Number of Root Consonants
- 3. Weak Root Consonants
- 4. Sound Pattern Classes of Roots
- 5. Causative Sound Pattern Classes
- 6. Other Sound Pattern Classes

II. The Second Dimension: Concept Class of the Root

- 1. Concept Class
- 2. Sound Pattern Classes and Concept Classes
- 3. Transitive Verbs and Intransitive Verbs

- a. Definition
- b. Comparison of English and Middle Egyptian
- c. Three Types of Intransitive Verbs
- d. Transitive Verbs without Direct Object



e. pr "Become as Intransitive Verbs (Followed by m)



Ouestions

Identification of Sound Pattern Class and Concept Class

Lesson 26 (§§ 5.74-115, pp. 366-89)

III. The Third Dimension: Inflection

A. The Structure of Inflection

- 1. The Concept of Inflection: Entities
- 2. The Sound Pattern of Inflection: Inflectional Endings
- 3. Entities as Linked to Inflectional Endings
- 4. Parallel Inflectional Endings
- 5. The Only Three Elements in the Concept of Inflectional Endings: Person, Gender, and Number
- 6. The Possible Combinations of Person, Gender, and Number in Inflectional Endings
- 7. The Two Strings of Inflectional Endings: Conjugation and Declension
- 8. The Three Types of Conjugation and the Two Types of Declension, Each Type Distinguished by Sound Pattern
- 9. Substitution of Inflectional Endings by Other References to Entities
- 10. The First Type of Conjugation: The Suffix Conjugation
- 11. The Second Type of Conjugation: The Stative Conjugation
- 12. The Third Type of Conjugation: Conjugation by Dependent Pronouns
- 13. The First Type of Declension: Declension by Adjectival Endings
- 14. The Second Type of Declension: Declension by Third Person Suffix Pronouns
- 15. Specific Combinations of Person, Gender, and Number

Questions

Thirteen Verbs for Memorization

Exercise in Identifying Inflectional Endings

Lesson 27 (§§ 5.116-63, pp. 390-422)

- 16. The Two Locations of Inflectional Endings: Attached to the Stem (Direct Inflection) or to an Auxiliary (Indirect Inflection)
- 17. The Number of Inflectional Endings in Either Location (Direct or Indirect Inflection): None, One, or Two
- 18. Parallel Inflection and Double Inflection
- 19. Direct Inflection Only and Indirect and Direct Inflection Combined
- 20. The Six Binary Combinations of Absence of, Single, and Double Inflection in Indirect and Direct Inflection Combined
- 21. Absence + Absence
- 22. Absence + Single
- 23. Single + Absence
 - a. Suffix Conjugation + Absence
 - b. Stative Conjugation + Absence
 - c. Conjugation by Dependent Pronouns + Absence
 - d. Declension by Adjectival Endings + Absence
 - e. Declension by Third Person Suffix Pronouns + Absence
- 24. Single + Single
 - a. Parallel Conjugation (Conjugation + Conjugation)
 - i. Suffix Conjugation + Suffix Conjugation

- ii. Conjugation by Dependent Pronouns + Suffix Conjugation
- iii. Suffix Conjugation + Stative Conjugation
- iv. Conjugation by Dependent Pronouns + Stative Conjugation
- v. Stative Conjugation + Stative Conjugation
- b. Parallel Inflection (Declension + Conjugation)
 - i. Declension by Adjectival Endings + Suffix Conjugation
 - ii. Declension by Adjectival Endings + Stative Conjugation
- 25. Double + Absence
- 26. Double + Single

B. The Complete Coordinates of Inflection

Questions

Exercise in Identifying the Number of Inflectional Endings and the Number of Entities

Lesson 28 (§§ 5.164-80, pp. 423-37)

IV. The Fourth Dimension: Components

Introduction

- a. Dimension 4 in relation to the Other Dimensions
 - i. Dimensions 1, 2, 3 in relation to 4, 5, 6, 7, 8
 - ii. Dimension 4 in relation to 5, 6, 7, 8
 - iii. Sound Pattern Dimensions (1, 3, 4) and Concept Dimensions (2, 3, 5, 6, 7, 8)
 - iv. Links between Sound Pattern Dimensions and Concept Dimensions
 - v. Visible Dimensions and Invisible Dimensions
- b. Seven Observable Component Types
- c. Unobservable Components

Questions

Lesson 29 (§§ 5.181-96, pp. 438-47)

- 1. Gemination
 - a. Definition
 - b. Gemination and the Verb's Dictionary Form
 - c. Different Degrees of Diagnostic Significance
 - d. The Three Types of Gemination
 - i. Type 1
 - ii. Type 2
 - iii. Type 3
 - e. Gemination and the Principle of Parallelism
- 2. Absence or Presence of r in rd(y) "give"
 - a. Definition
 - b. Diagnostic Value of r

Ouestions

Exercise in Transcription and Identification of Verb Forms

Lesson 30 (§§ 5.197-219, pp. 448-59)

- 3. "Weak" Consonants
- 4. Singular Substantival Endings
- 5. Infixes
 - a. The Nine Infixes
 - b. Seven General and Two Special Infixes
 - c. Relations to What Precedes and What Follows

- i. Relation to What Precedes
- ii. Relation to What Follows
- d. Combinations of Infixes
- 6. Prepositions

Questions

Exercise in Transcription and Identification of Verb Forms

Lesson 31 (§§ 5.220-35, pp. 460-68)

- 7. Auxiliaries
 - a. Definition
 - b. Separability from the Stem
 - c. Verbal and Non-verbal Auxiliaries
 - i. Verbal Auxiliaries
 - ii. Non-verbal Auxiliaries
 - d. Auxiliary, Main Constituent, Compound Verb Form
 - e. Possible and Impossible Combinations of Auxiliaries and Main Constituents
 - f. General Combinations of Auxiliaries and Main Constituents
 - g. Verbal Auxiliaries Containing Other Components
 - h. Verbal Auxiliaries Containing Other Auxiliaries
 - i. Elements Associated with Auxiliaries

Questions

Exercise in Transcription and Identification of Verb Forms

Lesson 32 (§§ 5.236-66, pp. 469-85)

- 8. Double Appearance of a Component
- 9. Relations as Empirical Substitutes for Unobservable Components
 - a. Incomplete Writings of Verb Forms as a Diagnostic Handicap
 - b. Relations of Components with Other Elements
 - c. Relations of Juxtaposition and Substitution
 - d. Empirical Character of Relations of Juxtaposition and Substitution
 - e. Exploitation for the Purpose of Diagnosis of Visible Relations between Elements when the Elements Themselves are Partially Invisible
 - f. Proposing Identifications of Verb Forms by means of Visible Relations between Elements
 - i. Lack of Visible Elements
 - ii. Skepticism as an Attitude
 - iii. Agnosticism as an Attitude
 - iv. Two Relations of Substitution Derived from Relations of Juxtaposition
 - v. Statements about Invisible Elements Inferred from Relations between Elements
 - vi. Two Reasonable Assumptions
 - vii. Defining Verb Forms by means of Relations
 - viii. Diagnosing General Verb Forms and Specific Verb Forms by means of Relations
- 10. Too Many or Too Few Visible Components for Diagnosis
- 11. Stem and Inflection as Substitute Information about Dimensions 5 to 8 *Ouestions*

Lesson 33 (§§ 5.267-86, pp. 486-98)

- 12. The Organization of Components: Survey of Sections 13 to 16
- 13. Components Encompassing Components
- 14. Counting Components
 - a. Counting Regardless of Type
 - b. Counting in light of Type
- 15. Location of Components
 - a. Regardless of Type

- b. Location of Components per Type
- 16. Combinations of Components

Questions

Exercise in Transcription and Identification of Verb Forms

Lesson 34 (§§ 5.287-319, pp. 499-518)

- 17. Spaces in Verb Forms
 - a. Disruptions of a Verb Form's Continuity
 - b. Understanding Unfilled Spaces as Absences
 - c. The Enclitic Character of the Space Fillers
 - d. The Two Types of Space Fillers: Enclitic Particles and Enclitic Pronouns
 - e. The Two Main Locations of Spaces and Which Types of Space Fillers Fill Them
 - i. The Two Locations: Preceding the Stem and Following the Stem
 - ii. The Types of Space Fillers Filling the Two Locations
 - f. Types of Elements Separated from the Stem by Words Filling Spaces
 - i. Before the Stem: Only Auxiliaries without Inflection and Auxiliaries with or without Their Inflection
 - ii. After the Stem: Only Substantives or Substantival Phrases Serving as Inflection
 - g. On the Shrinking and Expanding of Spaces Occupied by Enclitic Particles and Inflection
- 18. Absences of Components and Absences as Components
 - a. Two Conditions Adding Sharpness to Absence
 - b. A Single Absence with Different Functions
- 19. Concluding Illustration of the Difference between Fact and Inference *Ouestions*

Exercise in Transcription of Verb Forms and in Location of Spaces in Them

Lesson 35 (§§ 5.320-46, pp. 519-34)

V. The Fifth Dimension: Negation

- 1. Dimensions 4 and 5 to 8
- 2. The Difficulty of Defining Concepts
- 3. Defining the Concept of Negation
- 4. Sound Patterns in Dimension 4 Linked to the Concept of Negation in Dimension 5
- 5. Negation Verbs
- 6. The Negatival Complement
- 7. Combinations of Negations

VI. The Sixth Dimension: Voice

- 1. Voice as a Concept of Verb Forms of Transitive Verbs Except the Stative
- 2. The Concept of Voice Defined in terms of the Two Roles of Inflection in the Event
- 3. Sound Patterns in Dimension 4 Linked to the Active and Passive Voice in Dimension 6
- 4. Association of Verb Forms of Intransitive Verbs Except the Stative with the Active Voice
- 5. Association of the Stative Conjugation with either the Active Voice or the Passive Voice *Questions*

Exercise in Transcription and Identification of Verb Forms

Lesson 36 (§§ 5.347-88, pp. 535-63)

VII. The Seventh Dimension: Time

- 1. Dimension 7 Compared to Dimensions 5, 6, and 8
- 2. The Clustering of Tidbits of Concept in a Single Tidbit of Sound Pattern
- 3. Difficulties in Defining Dimension 7
- 4. Tense

- 5. Aspect
- 6. Absolute and Relative Tenses
 - a. Definition
 - b. The Principle of Relative Tense
 - c. Middle Egyptian Compared with English
- 7. Non-contingent and Contingent Tenses
- 8. Non-preterite and Preterite Tenses
- 9. Narrative and Discussive Tenses

VII. The Eighth Dimension: Function

- 1. Definition of Function
- 2. Entity, Property, Circumstance
- 3. Independent and Dependent Verb Forms
- 4. Nominal Verb Forms
- 5. Dependent Verb Forms and Clauses
- 6. An Example: The Substantival Verb Form, Functioning like a Substantive, and Referring to an Entity
 - a. Substantival Verb Forms Are Not Substantives
 - b. Affinity of Substantival Verb Forms with Substantives
 - c. Substantival Verb Forms Refer to Entities
 - d. Examples of Positions Occupied by Both Substantival Verb Forms and Substantives

Questions

Exercise on the Use and Translation of Substantival Verb Forms

APPENDIX I: The Story of the Decipherment

APPENDIX II: Solutions to the Exercises

APPENDIX III: Complete Survey of the Coordinates of the Verb (Chapter Five)

APPENDIX IV: Errata in Catalogue of Coordinates and Satellites of the Middle Egyptian Verb (1996)

APPENDIX V: Grammatical Terms and Their Definitions

Preliminary Remarks
Terms and Definitions

APPENDIX VI: Contiguity as a Key Concept

APPENDIX VII: Sample Syllabus

APPENDIX VIII: Sample Test

VOCABULARY

HIEROGLYPHIC SIGNS

INDEXES

- 1. Passages Cited
- 2. Subjects
- 3. Selected Egyptian Words and Word Parts

PREFACE

What can be said can and should always be said more and more simply and clearly.

Karl Popper

Everything interesting is a matter of organization, not of primal substance.

Bertrand Russell

As the laws of the human intellect do not depend upon our will, so the forms of the science, of which they constitute the basis, are in all essential regards independent of individual choice.

George Boole

I read the most about scientists. The purity of their thinking and how they are measured makes them very attractive to me.

William H. Gates, Jr. *Fortune*, 1.16.'95, p. 44

Ancient Hieroglyphic Egyptian is attested in writing for a period of about 3000 years. During this time, the language changed much. Five or six successive stages are distinguished in its long history. The stage traditionally chosen to begin studying Egyptian is Middle Egyptian, spoken around 2000 B.C.E. It is the stage described in the present grammar. Part 1 is entitled "Elements." Part 2 will bear the title "Links." This means to evoke the notion that Part 1 provides basic building-blocks that make up the more complex structures described in Part 2. This Preface is not necessary reading for proceeding to the Introduction beginning on page 1 and then on to Chapter One.

FOUNDATIONS

In RECENT YEARS, there has been much ado about the Standard theory of Middle Egyptian grammar. Opinions differ as to the degree of its validity. The Standard theory does not answer every problem of Egyptian grammar, nor does it mean to. It is a theory that goes as far as the empirical facts allow it to go. In fact, because hieroglyphic writing does not represent Middle Egyptian fully, there are certain questions we will never be able to answer. Still, it would be useful to see whether a grammar can be entirely constructed while hardly contradicting any tenet of the Standard theory in any major way. No such grammar exists. The present work attempts to provide one.

What is the Standard Theory?

The Standard theory is basically Polotskyan theory, named after H.J. Polotsky (1905-1991). The main tenets of the Standard theory are found in three of Polotsky's works: *Studies in Coptic Syntax* (1944), *Egyptian Tenses* (1965), and *The Transpositions of the Verb in Classical Egyptian* (1976). A general discussion of the Standard theory can be found in Antonio Loprieno's *Ancient Egyptian: A Linguistic Introduction*, published by Cambridge University Press in 1995.

Special Standard Theory and General Standard Theory

No one would doubt that part of what is called the Standard theory is now generally accepted. This is obvious from the introductory grammars produced in recent years. I have briefly surveyed these grammars in volume 25 (1994) of the journal *Orientalia Lovaniensia Periodica*. It should be remembered, however, that it took about forty years for these observations to become widely accepted. Although certain aspects of the Standard theory seem widely accepted, there is much controversy on other points. This has even prompted some to reject the Standard theory entirely. It may therefore be useful, in light of recent developments, to repeat here a suggestion made in *Le Muséon* 108 (1995), namely to distinguish between

a special theory, which seems now generally accepted, and a general theory, which has provoked much controversy.

The special Standard theory consists of a number of observations that are empirically solid. However, Polotsky expanded these observations into an overarching system in which three categories are central: (1) the substantive and all that is substantival, (2) the adjective and all that is adjectival, and (3) the adverb and all that is adverbial. All that is substantival refers to entities. All that is adjectival refers to properties. All that is adverbial refers to circumstances.

The centrality of these three categories in language is ultimately just a result of the centrality of entities, properties, and circumstances in reality as we perceive it. Language is after all a map of reality. Reality consists in large part of entities ("car") that have properties attached to them ("blue") and that occur in certain circumstances ("in the street").

The emphasis on this trinity is most typical of the general Standard theory. It is clear that not all of Egyptian grammar can be fitted into these three categories. But are the three categories substantive, adjective, and adverb as pivotal as Polotsky liked to believe? The test is whether an entire grammar can be organized while making them that pivotal. This grammar is such a test.

[Among the most recent contributions to the on-going discussion are the following: Alviero Niccacci, review of Thomas Ritter's Das Verbalsystem der königlichen und privaten Inschriften: XVIII. Dynastie bis einschließlich Amenophis III (Wiesbaden 1995), in Liber Annuus: Studium Biblicum Franciscanum 47 (1997) 537-66; Helmut Satzinger and Ariel Shisha-Halevy, "The Snark is Dead," Lingua Aegyptia: Journal of Egyptian Language Studies 6 (1999) 167-76; Wolfgang Schenkel, "Standardtheorie und invertierte Standard theorie," Zeitschrift für ägyptische Sprache und Altertumskunde 125 (1998) 140-60; Pascal Vernus, Les parties du discours en Moyen Égyptien: Autopsie d'une théorie (Geneva 1997).]

Sentence Type and Verb Form

One feature most characterizes the Standard theory. It is the Archimedean point of Polotsky's contribution to Egyptian grammar. This feature explains much about this grammar's organization. The feature is a *link* between two crucial concepts: sentence type and verb form. "Substantival," "adjectival," and "adverbial" are bridge notions linking the concepts of sentence type and verb form. Verb forms are obviously important. All languages have them. But the importance of sentence types may be less apparent. Nothing is more characteristic of Egyptian than the distinction between them. Their importance may be illustrated briefly by a comparison between Egyptian and English. Consider the following three English sentences.

He is a carpenter.

He is good.

He is in the house.

In English, these three sentences are all of the same type. In each, "he is" is followed by a third element: either "a carpenter," or "good," or "in the house." But in Egyptian, the three types differ. The equivalent of "good" *precedes* the equivalent of "he." This is the adjectival sentence type. On the other hand, the equivalent of "in the house" *follows* the equivalent of "he." This is the adverbial sentence type. Then again, the equivalent of "he is a carpenter" contains the word *pw*. This is the substantival sentence type.

These differences in sound pattern correspond to differences in concept. The concept of substantival sentences ("he is a carpenter") is to associate two entities ("a carpenter" and "he") with one another. The concept of adjectival sentences ("he is good") is to associate a property ("good") and an entity ("he") with one another. The concept of adverbial sentences ("he is in the house") is to associate a circumstance ("in the house") and an entity ("he") with one another. The fourth sentence type is the verbal sentence. The fifth is the existential sentence.

From 1936 onward, Polotsky showed the existence of the link between verb form and sentence type. This was mainly achieved by giving the categories substantival, adjectival, and adverbial a presence in the flesh as bridge notions between verb form and sentence type. This presence manifests itself in large part in the substantival verb forms and the adverbial verb forms.

The link between verb form and sentence type had already earlier led an existence of sorts in the first

edition of A.H. Gardiner's *Egyptian Grammar* (1927). But it was a shadow existence. The reason is that the bridge notions were considered "virtual." The so-called "virtual" substantival or noun clauses and "virtual" adverbial clauses play a crucial role in Gardiner's grammar. These clauses are "virtually" substantival or "virtually" adverbial. It is not quite clear what this means. "Virtual" is a tormented term. It allows something to exist and not exist at the same time. Something only truly exists in language if it has an empirical body, even if one sometimes needs to assume such an empirical body, as with vowels in hieroglyphic writing. Two inevitable questions about any string of words suspected of being a substantival clause are: Is it or is it not a substantival clause? Which undeniable empirical signals make it a substantival clause? "Virtual" does not answer these questions. By contrast, Polotsky showed which empirical features make substantival clauses what they are. He never assumes the existence of a substantival clause without pointing out, by fact or by inference, which empirical signals mark it as substantival. Giving empirical presence to the link between sentence type and verb form was as revolutionary in Egyptian grammar as linking speed and mass was in physics.

EIGHTEEN THESES

In a Language Textbook, keeping apart what is owed to others from what is original is a problem. As regards what is owed to others, Middle Egyptian was deciphered. Everything we know about it was therefore said first some time somewhere by someone since the early nineteenth century. Acknowledging all this is obviously impossible. Such a task ought to be accomplished in an annotated bibliography of Egyptian grammar or in a detailed history of its study in the last two centuries. Meanwhile, standard bibliographical tools such as the *Annual Egyptological Bibliography* (from 1947 onwards) give a notion of what has been done by whom. Another procedure, acknowledging some contributions at the exclusion of others, is in danger of appearing invidious. The solution is to omit references, as is traditional in a textbook like this one.

All grammars of Middle Egyptian are bound to resemble one another in many ways. On the other hand, this grammar, like every grammar, has its idiosyncracies. These idiosyncracies may perhaps lay some claim to originality. But their discussion can hardly disrupt the presentation of the language itself. I will therefore summarize here in which respects the present grammar sets itself apart from most other grammars.

First is the role of the Standard theory. The plan, already outlined above, is to describe Middle Egyptian as much as possible in light of this theory. This accounts for much of this grammar's individual character. Second is organization. The material is organized as much as possible according to the structure of the language. Third are eighteen features that will be described individually below. These features may be called theses, as if this work were a dissertation. Theses require argued defenses. No lengthy argument can be developed here for each thesis. But in fact, I have had occasion to defend most of these theses elsewhere and to relate them to work done by others. The following discussions of each of the eighteen theses have three or four parts. First, the title indicates what the thesis is about. Second, a brief definition follows. Third is a more elaborate description. Fourth are references to more detailed discussions elsewhere. Not all discussions have references.

This grammar is otherwise on the whole conservative. It is limited to describing all the observable signals of the language with a rough definition of the meaning that they convey.

THESIS 1: On the Structure of Hieroglyphic Writing and the Dual Structure of Language

Definition: The fact that language is a very large set of links between tidbits of concept and tidbits of sound pattern explains why the ideogram denotes both meaning and sound whereas the phonogram expresses sound but not necessarily meaning, an undeniable and obvious, yet hardly noted and most curious, fact.

Language is entirely dual. It is completely made up of links between two elements. Language is a very large set of links between tidbits of sound pattern and tidbits of concept. Language is not really either sound patterns or concepts or both sound patterns and concepts. It is the *links* between sound patterns and concepts. These links mean that all the speakers of a given language agree implicitly to attach certain

tidbits of concept or meaning to certain tidbits of sound pattern to make mutual comprehension possible. For example, in English, the tidbit of sound pattern *tree* is attached to the concept that we all have of a rather large specimen of the plant world. In French, roughly that same tidbit of concept is attached to *arbre* as a tidbit of sound pattern. These links are usually called signs.

This duality of language is heeded throughout this grammar. In fact, it is also applied to the analysis of the hieroglyphic script. I see no other way of explaining simply two undeniable and interrelated facts about hieroglyphic writing.

First, meaning signs or ideograms are also sound signs whereas sound signs are *not necessarily* also meaning signs. For example, the ideogram \square can denote the concept or meaning of a house by depicting a house in rough outline. But it also denotes the sound pattern pr. By contrast, neither the phonogram p denote the concept "count" in p "count."

Only together they do.

Meaning signs denote sound in addition to meaning, sound signs typically sound only. This asymmetry—if one may call it that—between ideograms and phonograms is most peculiar. It is a fact hardly ever considered in descriptions of hieroglyphic writing. Its explanation deserves a place in any theory of hieroglyphic writing. But there is more than just this asymmetry.

A second, related, fact is that phonograms sometimes do refer to concept. This is implied in the statement above that phonograms do *not necessarily* denote meaning or concept. When do phonograms refer to concept? Phonograms refer to concept when they refer to a *complete* sound pattern. Only complete

sound patterns are attached to concepts. For example, the phonogram j and the phonogram p refer only to *part* of the complete sound pattern jp attached to the concept "count" in the word "count." Neither of the two phonograms denotes the concept "count." Only together they do.

By contrast, phonograms do denote a concept when they refer to a *complete* sound pattern. For example, the phonogram \bigcap refers to the complete sound pattern ${}^c n$. This sound pattern is attached to the concept "live" inside the Egyptian word "live," namely ${}^c n$. For this reason, the phonogram \bigcap does denote a concept.

This principle accounts for the prolific use of T as a symbol of life in ancient Egyptian art. By itself, as a drawing, the symbol T has nothing to do with life. But as a phonogram, it refers to the complete sound pattern $^c n$ and therefore also denotes the concept "life" that is attached to this sound pattern.

The same phonogram may or may not denote a concept. An example is the phonogram m. It does refer to a complete sound pattern in the word m "in" and therefore also denotes the concept "in." But it refers only to part of a sound pattern in the word m "hear" and therefore does not denote the concept "hear."

[For the foundations of this type of analysis of hieroglyphic writing, see "On the Nature of the Hieroglyphic Script," *Zeitschrift für ägyptische Sprache und Altertumskunde* 121 (1994) 17-36; see also "Champollion's Ideogram and Saussure's *signe linguistique*," *Orientalia* 64(1995) 1-11.]

THESIS 2: On the Dual Structure of Language and the Definition of the Sentence Types

Definition: In accordance with the fundamental duality of language, the definition of each sentence type consists of two parts: the definition of the sound pattern of the sentence type and the definition of

the concept of the sentence type.

As was noted above, language is dual. Sentence types can be no exception. Just as a word has a sound pattern and a concept, a sentence type ought to have a sound pattern and a concept. It is therefore necessary to define both sound pattern and concept for each sentence type. The two are defined separately, but it is the *link* between them that is language.

For example, the sound pattern of the adjectival sentence is an undeclined adjective followed by a reference to an entity. All the adjectival sentences share the same concept: they associate a property and an entity with one another.

["On Distinctive and Isolating Emphasis in Egyptian and in General," *Lingua Aegyptia: Journal of Egyptian Language Studies* 1 (1991) 33-56 at 52-56.]

THESIS 3: On the Need to Distinguish between Fact and Inference

Definition: The need to distinguish constantly between fact and inference sets apart Middle Egyptian grammar from the grammar of most languages.

In Egyptian grammar as in any science, there is ultimately only one basis for drawing conclusions: the observation of empirical fact. However, hieroglyphic writing does not present the full facts of Middle Egyptian. There is therefore a long tradition in Egyptian grammar of assuming the existence of some unobservable facts. The most striking example is vowels, which are not written. As a result, there are two levels in Middle Egyptian grammar: the level of the observable facts and the level of the inferred facts. The need to distinguish constantly between these two levels makes Middle Egyptian grammar more cumbersome than the grammar of most languages.

It should be stressed that inferences are as empirical as facts. The circumstance that the empirical body of inferences is for some reason not accessible to observation does not relieve one of the duty of describing, as much as the circumstances allow, what that empirical body may have been. The existence of inferred facts can of course never be positively proven. But that existence can at least be supported indirectly by observed empirical facts. For example, in order to support the inference that Middle Egyptian had vowels, one may refer to the fact that related languages have vowels. So does Egyptian in its latest stage, because vowels are written in Coptic. Inferences are only one step removed from observable facts, as it were.

Another important empirical tool for supporting inferences is *relations*. How relations can make up for the lack of visible facts is further discussed under Thesis 11 below. There are countless instances in which relations are used and accepted by all as the only tool for distinguishing between two verb forms if these two verb forms are written exactly alike. And we all use relations constantly in engaging the world around us. There is a difference between a chair with its back to the wall and a chair with its front to the wall. The wall and the chair remain the same. It is the spatial relation between the two that differs. Nevertheless, relations or arrangements between things are still often viewed with suspicion because they are not directly visible in the way that the things themselves are.

["A History of Research on the Prospective *sm.f* in Middle Egyptian," *Journal of the American Research Center in Egypt* 30 (1993) 11-31 at 11-13; "A Note on Teaching and Learning Egyptian," *Lingua Aegyptia: Journal of Egyptian Language Studies* 3 (1994) 1-5.]

THESIS 4: On the Exclusion of Subject and Predicate, Topic and Comment, and Theme and Rheme from This Grammar

Definition: Concept pairs such as subject and predicate, topic and comment, and theme and rheme have no demonstrable empirical presence. They are therefore extraneous to the business of grammar strictly speaking. They are in fact not at all certain to exist. They will not be used in the present grammar.

Few concepts are more popular in Egyptian grammar today than pairs such as subject and predicate, topic and comment, and theme and rheme. To my knowledge, no one has ever defined what the empirical body of these phenomena is supposed to be. Only an empirical presence could lift these notions above

individual choice and randomness. Perhaps the lack of such an empirical body explains why no two students of these notions have ever defined them in the same way. But then, how is agreement possible about something that does not exist? In science, the truth is not made. It already exists and needs to be discovered. I strongly suspect that notions of subject and predicate create truth where none existed.

The mind is potentially a fickle thing. Unfettered by facts, it readily produces notions that bear no relation to reality. Furthermore, one mind can easily persuade another of the existence of certain imaginary notions. One soon finds a number of brains honing sympathetically in unison regarding notions that are nowhere to be seen or heard. What may be good in other areas of society is not good for science. Subject and predicate and similar concepts present a great temptation to generate complexity and sophistication independently of reality. This temptation should be resisted.

Once an empirical phenomenon has been detected, different theories may arise about its function. However, differing of opinion about something that exists is not the same as differing of opinion about something that does not exist. Theory is necessary. But it should revolve around facts, or at least around facts that are assumed to exist until their existence can be positively proven.

What follows is an example of the kind of ideas that circulate in this connection. The belief is wide-spread that, in a statement such as "John goes to school," one says about John that he goes to school. "John" is the subject. That is, it is that part of the sentence about which one says something. "Goes to school" is the predicate. That is, it is that part that says something about the subject. However, this belief is without foundation in fact. It reflects Aristotelian logic. The eminent French linguist Lucien Tesnière already noted in the fifties in his *Elements of Structural Syntax* (at page 104) that the distinction between subject and predicate is a "survival not yet eliminated from the times that all of grammar was founded on logic." What is more, even in logic, the Aristotelian distinction between subject and predicate has been abandoned. George Boole has demonstrated in his *Investigation of the Laws of Thought* (1854) that the laws of logic are mathematical. Logical propositions can be presented in the form of mathematical equations. In mathematics, stating x = y is always the same as stating y = x. There is no logical difference between stating about x that it is y or about y that it is x.

It is also commonly thought that "John" tends to convey less important information than "goes to school" in "John goes to school." I know of no empirical facts to support this belief. Why, in effective communication, should not each element of a sentence contribute equally to the information conveyed by the sentence? In ranking elements in importance, the key question is whether an element is or is not necessary for understanding the full message. The simple test is to omit that element and consider what remains. From this point of view, all elements of a sentence appear equally important. Being a little less important would be like being a little less pregnant.

One might, however, make the following objection to the above argument. If "John" in "John goes to school" had already been mentioned before in the text, then surely "John" would be less important information because it is not new information. However, that is precisely why "John" is typically replaced by "he" or similar elements when "John" is referred to again later in a text. "He" is again as fully indispensable as any other part of the sentence to understand the full message conveyed by the sentence. "He" makes it possible to describe the role of "John" in the new sentence. In sum, each part of a sentence typically makes its own indispensable contribution to the message conveyed by the sentence. If any of the parts is missing, then the message would not be quite the same.

The absence of subject and predicate is this work's sole significant departure from Polotsky. But Polotskyan theory seems little affected by being rid of this conceptual ballast. Ferdinand de Saussure, the founder of modern linguistics, would have nothing of it. But somehow, these Aristotelian categories survived after Saussure in the Prague School and elsewhere. It was in this climate of justifiable enthusiasm about the progress of linguistics that Polotsky wrote his foundational *Studies in Coptic Syntax* (1944).

[For additional discussion of the present thesis, see "New Horizons in Coptic and Egyptian Linguistics," *Chronique d'Égypte* 63 (1988) 391-406 at 401-6 especially 402 note 1; "Isolating and Distinctive Emphasis in Egyptian and in General," *Lingua Aegyptia: Journal of Egyptian Language Studies* 1 (1991) 33-56 at 36-37; review of Friedrich Junge, "*Emphasis*" and Sentential Meaning in Middle Egyptian (Wiesbaden 1989), in *Journal of the American Oriental Society* 112 (1992) 330-33 at 331; "Sentence Pattern and Verb Form: Egyptian Grammar since Polotsky," *Le Muséon* 108 (1995) 39-48 at 45 note 12; *Materials for Egyptian*

Grammar: Catalogue of Coordinates and Satellites of the Middle Egyptian Verb (Leuven 1996) 211-12 note 62;

"The Meaning of Jw in Old and Middle Egyptian in light of the Distinction between Narration and Discussion," Jerusalem Studies in Egyptology (Wiesbaden 1998) 19-36 at 30-31; "On Demotic Sacerdotal Decrees," Chronique d'Égypte 73 (1998) 54-65 at 61-62.

I had earlier myself followed traditional theories on subject and predicate (see "Specificity or Emphasis in Egyptian and Coptic Nominal Sentences?," *Chronique d'Égypte* 61 [1986] 358-67 and "The Emphatic Nominal Sentence in Egyptian and Coptic," cited under Thesis 7 below). But already in these articles, a distinction is made between predicates and special predicates called vedettes. All that was left to do, then, was to note that what makes a special predicate special is a distinct and empirical phenomenon (it is called isolating contrast in Thesis 5), while being just a predicate is not an empirical phenomenon at all.]

THESIS 5: On Isolating Contrast and Distinctive Contrast as Empirical Phenomena

Definition: If one extracts from the discussion of subject and predicate, topic and comment, and theme and rheme that which is empirical, what remains are signals that can be divided into two groups, those that denote isolating contrast and those that denote distinctive contrast.

It has been suggested above that subject and predicate are not empirical phenomena. What complicates matters is that the discussion on subject and predicate is fully intertwined with the discussion of phenomena that do have an empirical body. This may give the false impression that subject and predicate themselves somehow have an empirical basis. What is necessary therefore is surgically removing from the discussion on subject and predicate that which is empirically verifiable. Indeed, there are two phenomena for which objectively observable sound patterns can be pointed out. These phenomena will be called *isolating contrast* and *distinctive contrast*. Like everything in language, they are links between tidbits of sound pattern and tidbits of concept. However, the two phenomena are named here after their concept, not their sound pattern. Isolating contrast and distinctive contrast occur as empirically distinct phenomena in all languages.

The concept of contrast is of a different kind than "house" as the concept of the word *pr*. It has a certain abstract quality. A razor-sharp and simple definition would therefore at first sight seem difficult. I have nevertheless tried to provide such a definition in terms of the invariable laws of thought, as formulated in Boolean algebra. This definition shows that isolating contrast and distinctive contrast are two closely related members of the same species.

Let us assume that x is a linguistic element, say "sheep." In Boolean algebra 1 - x is then the class of "non-sheep," or "everything but sheep," or "the universe (1) minus (-) sheep (x)."

In applying isolating contrast to x, what one states is at the same time x and 1 - (1 - x), that is, "x, and not not x," or "sheep, and not not sheep," or "sheep, and not something else." By the simple operations of algebra, it is obvious that 1 - (1 - x) = 1 - 1 + x = 0 + x = x. Indeed, "not not sheep" refers to the same reality as "sheep." But the former also conveys an isolating contrast between "sheep" and the rest of reality.

In applying distinctive contrast to x, what one states is at the same time x and 1 - x = ..., that is, "x, as opposed to someone or something else (1 - x) that is or does (=) something else."

These definitions seem sharp and simple. They may be paraphrased as follows. In isolating contrast, an element is marked by some empirical signal as distinct from and at the exclusion of other elements implied or explicitly mentioned in the context. One sound pattern that can be attached to the concept of isolating contrast is a distinct kind of intonation. For example, one might state, "Jill went to Rome" (implying: not Jack, that is, not not Jill). The special intonation is marked by italics. Jill is contrasted with someone else, at the exclusion of that someone else. Another sound pattern attached to the concept of isolating contrast is the construction "it is ... that...," the so-called cleft sentence. For example, one might state, "it is Jill that went to Rome" (implying: not Jack). Again, Jill is contrasted with Jack, at the exclusion of Jack.

In distinctive contrast, an element is marked by some empirical signal as distinct from other elements to which something else applies. The concept of distinctive contrast differs from that of isolating contrast in that an element is not marked at the exclusion of other elements. One sound pattern attached to the concept of distinctive contrast is a distinct kind of intonation. For example, one might state, "Jack went to

Rome, *Jill* went to Berlin." In this type of intonation too, Jack is contrasted with Jill. But in this case, he is not presented at the exclusion of Jill, as in the case of isolating contrast.

The intonations attached to isolating contrast and distinctive contrast are empirically different: "I did" with isolating contrast (implying: not you) is pronounced differently from "I did" with distinctive contrast (implying: but what about you?).

Because of the more forceful pronunciation of "Jack" in "Jack went to Rome," it is tempting to think, as is often done, that "Jack" is somehow more important information than the rest of the sentence. But this is not a necessary conclusion. Isolating contrast is an item of information that contributes to the whole message on the same level as all the other parts of the sentence. The more forceful pronunciation is just an empirical marker. It is true, however, that "Jack" contains two items of information, both empirically verifiable. First, "Jack" denotes a certain person. Second, the special intonation marked by italics contrasts Jack with other persons. Thus, it is not so much that "Jack" contains more important information but rather that "Jack" contains more information.

Intonation is not represented in hieroglyphic writing. This poses a problem. Intonation matters in most if not all languages. It is therefore quite possible that it was also an empirical fact of Middle Egyptian. But if intonation was one of the sound patterns of isolating contrast or distinct contrast, it is not accessible to observation. To some extent, it can perhaps be suggested as an inference (see Thesis 7).

["Isolating and Distinctive Emphasis in Egyptian and in General," *Lingua Aegyptia* 1 (1991) 33-56; "Contrast in Egyptian and in General and the Laws of Thought in Boolean Algebra," *Göttinger Beiträge zur Sprachwissenschaft* 2 (September 1999).]

THESIS 6: On the Crucial Role of the Link between Sentence Type and Verb Form and on "Substantival," "Adjectival," and "Adverbial" as Bridge Notions between the Two

Definition: The link between verb form and sentence type is the most distinctive characteristic of Egyptian grammar since Polotsky. "Substantival," "adjectival," and "adverbial" are three bridge notions in this link.

This thesis has already been discussed above and is reflected in the pivotal position of Chapters Four and Five in this grammar. Chapter Four deals with sentence types. Chapter Five deals with verb forms. In subsequent chapters in Part 2, the link between them will be more closely defined. Notions such as "substantival" serve as bridge notions between verb form and sentence type in the following instance. The adverbial sentence type consists of a substantival member and an adverbial member. Verb forms can be substantival or adverbial. As such, they can appear in the substantival or the adverbial member of the adverbial sentence type. Verb form and sentence type are thus linked by means of the notion "substantival."

["Sentence Pattern and Verb Form: Egyptian Grammar since Polotsky," Le Muséon 108 (1995) 39-48.]

THESIS 7: On the Distinct Character of Sentences with Isolating Contrast and Sentences without Isolating Contrast and on Applying this Observation to the Treatment of the Substantival Sentence

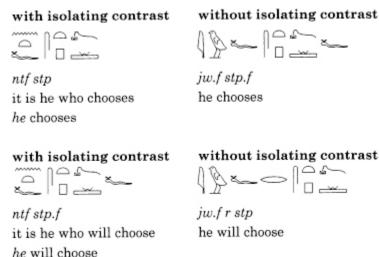
Definition: To the extent that isolating contrast is empirically verifiable, sentences with isolating contrast patently differ in constitution from sentences without isolating contrast. This observation can be extended by inference to the treatment of substantival sentences by describing them on two levels. The first, basic, level is the level of what we can see. The second level involves contemplating the possibility of isolating contrast as expressed by intonation.

Before turning to substantival sentences, it will be useful to make two observations about other sentences. The first observation is that sentences with isolating contrast look very different from sentences without isolating contrast, in as far as isolating contrast can be observed. The second observation is that isolating contrast may be viewed as being added to sentences without isolating contrast. Two levels can therefore be considered, a level without isolating contrast and a level with isolating contrast.

The first observation may be further described as follows. Isolating contrast is accessible to observation

only in as far as its sound patterns are represented in hieroglyphic writing. Whenever this is the case, sentences *with* isolating contrast patently differ in structure from sentences *without* isolating contrast. Two examples of English sentences exhibiting isolating contrast are "it is he who chooses" and "it is he who will choose." In both sentences, "he" is marked with isolating contrast by means of "it is ... that ...," that is, the so-called cleft sentence. The counterparts *without* isolating contrast are as follows: "he chooses" and "he will choose." What follows on the next page are the Middle Egyptian counterparts of these four sentences.

From these generic examples, it is clear that the sentences with isolating contrast differ from sentences without isolating contrast. This was to be expected. After all, everything in language being dual, concepts are attached to sound patterns. A difference in concept ought to correspond to a difference in sound pattern.



A second observation is supported by several indications, namely that isolating contrast is something that is added to a sentence that exhibits no isolating contrast. In other words, a sentence with isolating contrast contains (1) the complete information of the corresponding sentence without isolating contrast, and (2) in addition also isolating contrast. Thus, one adds italics to "he chooses" to obtain "he chooses," which exhibits isolating contrast. One adds "it is ... that..." to "he chooses" to obtain "it is he that chooses."

With these two observations in mind, we now turn to substantival sentences. Notions such as subject and predicate are traditionally crucial in analyzing this sentence type. But these notions will be avoided in this grammar. Isolating contrast will not be, however, because it is empirical. But isolating contrast cannot readily be observed in substantival sentences. Since isolating contrast exists everywhere else in Egyptian, one also expects it in this sentence type. Isolating contrast in the substantival sentence would make it possible to state both "he is an Egyptian" and "he is an Egyptian" (implying: not a Nubian). But what could the sound pattern of isolating contrast have been? The only candidate seems to be intonation, as in English. But since intonation cannot be observed, it must be inferred. Its presence cannot be positively proven, just as one cannot positively prove that Egyptian had vowels. Isolating contrast exists visibly elsewhere in Egyptian. Therefore, of two possible assumptions, assuming the existence of isolating contrast in substantival sentences may be a lesser evil than assuming its non-existence, just as assuming that Middle Egyptian had vowels is preferable to assuming that it did not. By this reasoning, isolating contrast had an empirical body in substantival sentences, but we cannot see it. Notions such as subject and predicate, on the other hand, nowhere else in the language have a demonstrable empirical body. There is therefore no incentive to assume that they had one in substantival sentences.

The following method will therefore be applied. On a first level, the substantival sentence will be described in terms of the visible facts only. The second level is that of reasonable inferences, facts that presumably existed but which we cannot observe. On this level, only the possibility of isolating contrast will be considered because isolating contrast does visibly exist in other sentence patterns and it is difficult to see why the substantival sentence would be an exception. The presumed sound pattern will be a special kind of intonation.

In addition to these considerations of inference, two indirect arguments of the empirical kind can be adduced in favor of the existence of isolating contrast in substantival sentences.

First, the ternary pattern sty pw "he is a farmer" and therefore originally meant something like "he is a farmer, (namely) Pepi." The free translation is "Pepi is a farmer." There are instances, however, in which this pattern means "the farmer is Pepi." In these instances, the sentence can be interpreted as an answer to "Who is the farmer?" Whenever this is the case, "Pepi" appears to exhibit isolating contrast ("Pepi, and no one else"). It is a fact that the substantival sentence is in such instances quite often parallel to other sentences in which isolating contrast is empirically observable. This suggests that the substantival sentence can also exhibit isolating contrast, namely by intonation, which remains unwritten.

Second is the fact that "he is Pepi" can be expressed both by Ppj and Ppj pw. A difference in sound pattern always suggests a difference in concept. Perhaps the difference is that ntf pw Ppj means either "he is Pepi" or "he is Pepi" but not just "he is Pepi," whereas Ppj pw means either "he is Pepi," but not "he is Pepi." The element pw cannot be emphasized.

Furthermore, it will be proposed in Thesis 8 below that viewing a sentence as an answer to a question, as has been done above, is already prejudiced to diagnose isolating contrast.

One can infer with some plausibility that substantival sentences in which the third and last member is the answer to an implied question express isolating contrast. I have elsewhere called them emphatic nominal sentences.

By the usual analysis of the ternary pattern (*sty pw Ppj*) as an extension of the binary pattern (*sty pw*), the meaning is "it is a farmer, namely Pepi." This is not the meaning of emphatic nominal sentences. They are equivalent in meaning to "it is Pepi that is the farmer." This also suggests the special character of the emphatic nominal sentence.

["The Emphatic Nominal Sentence in Egyptian and Coptic," *Crossroad: Chaos or the Beginning of a New Paradigm: Papers from the Conference on Egyptian Grammar, Helsingør 28-30 May 1986* (Copenhagen 1986) 91-117; published also, with minor alterations, in *Orientalia* 56 (1986) 37-54; I hope to survey research on the substantival sentence since 1986 and examine the theory of this sentence anew elsewhere.]

THESIS 8: On the True Purpose of the Question Test in Analyzing Substantival Sentences: to Identify Isolating Contrast when Present

Definition: The popular question test examines a statement by considering that statement as the answer to an unspoken question. The test is traditionally used to identify subject and predicate. But in fact, the question asks for isolating contrast. Its answer ought therefore to reveal isolating contrast. The question test is therefore biased. It can only find what it is looking for, namely isolating contrast.

The question test is well-known. Many students of Egyptian know it from Alan H. Gardiner's description in his *Egyptian Grammar* (31957, p. 101, § 126). What is at stake in this test according to Gardiner is to identify subject and predicate according to the "logical definitions of subject and predicate as respectively 'the thing spoken of and 'that which is affirmed or denied of the subject'."

A good test for the logical predicate is to cast the sentence into the shape of a question; then the elements which correspond to the interrogative word constitute the logical predicate. Thus in "I am your friend" the logical predicate is "your friend" whenever the sentence answers the question "what am I?"

There is something undeniably true about this test. The purpose of the present thesis is therefore by no means to reject the question test as invalid. It is easy for all to agree that it does achieve something. For example, consider the statement, "Brussels is the capital of Europe." This statement might conceivably be the answer to two questions: "What is Brussels?" and "What is the capital of Europe?" These two questions ask for the equivalent of "what?" "The capital of Europe" is that equivalent if "Brussels is the capital of Europe" answers the question "What is Brussels?" "Brussels" is that equivalent of "what?" if

"Brussels is the capital of Europe" answers the question "What is the capital of Europe?" There is something undeniably real about the question test.

Upon closer inspection, however, it appears that "what?" by definition always exhibits isolating contrast. It asks for a certain class of objects at the exclusion of all other classes of objects. This is fully confirmed by the facts of Egyptian. As a rule, question words such as "what?" require the use of an explicit construction expressing isolating contrast whenever such an explicit construction is available. For example, "What will you do?" must as a rule be expressed by a cleft sentence in all stages of Egyptian.

The Middle Egyptian expression is \(\sum \) \(\sum \)

If a question asks one to isolate a class of things, then the answer should fulfil this request by isolating a class. If isolating contrast is the purpose of the question, one expects that purpose to be fulfilled in the answer. Therefore, if "Brussels is the capital of Europe" answers the question "What is the capital of Europe?", the result will be "Brussels is the capital of Europe," with a slight rise in pitch affecting "Brussels," marked here by italics. This intonation isolates Brussels from other cities. Likewise, "Brussels is the capital of Europe" is an answer to the question "What is Brussels?" "The capital of Europe" is pronounced with a slight rise in pitch or intonation.

It appears, then, that the question test has limitations. An answer ought to produce what is asked for. And what is asked for is isolating contrast. Within this narrow framework, the question test is effective. But what if "Brussels is the capital of Europe" does not answer a question? It might just be part of a list of descriptive statements about Europe. Or it might be a statement under a photograph of a building that houses the European government.

All this means that the question test can be applied to a Middle Egyptian substantival sentence *only if* one already knows or assumes that it exhibits isolating contrast. If the substantival sentence does not exhibit isolating contrast, then by considering it the answer to a question, one forces that statement secondarily into a framework into which it does not belong by asking a question that is not being asked or to which that statement is not the answer.

Incidentally, the answers to "What is Brussels?" and "What is the capital of Europe?" would not quite be "Brussels is the capital of Europe." They would be shorter, namely "It's the capital of Europe" or "Brussels is" or the like. This further limits the validity of the question test.

In sum, the question test is valid. But its validity is limited. The question asks to reveal an element endowed with isolating contrast. Isolating contrast is a legitimate phenomenon with an empirical presence. The question test can be used to identify it. But if no isolating contrast is present in a statement, conjuring up a question may force that statement into being something that it is not in the first place, namely an answer to a question and therefore exhibiting isolating contrast. The question test then makes the sentence into something that it is not.

THESIS 9: On the Coordinates of Verb Forms

Definition: The fact that hieroglyphic writing does not represent the complete verbal system can be bewildering. In these difficult circumstances, viewing verb forms not as "things" but as "clusters of things" may promote conceptual clarity. Each of the "things" that make up a verb form is a coordinate in one of up to eight dimensions.

Developing this thesis fully is the main purpose of Chapter Five. Using the coordinates of verb forms allows more clarity in a matter that is inherently uncertain.

[Chapter Five is based on *Materials for Egyptian Grammar: Catalogue of Coordinates and Satellites of the Middle Egyptian Verb* (Leuven 1996), where this type of analysis was first proposed.]

THESIS 10: On the Distinction between Two Levels, Generic Verb Forms and Specific Verb Forms

Definition: The fact that hieroglyphic writing does not fully represent the Middle Egyptian verbal system necessitates a distinction between two levels unknown in the study of most other languages, in which verb forms are completely written out. The two levels are the level of generic verb forms and the level of specific verb forms.

All verb forms found in texts are specific. They are all concrete manifestations of one or the other generic verb form. Generic verb forms are abstractions. A generic verb form consists of all the common features of a certain set of specific verb forms. Most if not all Middle Egyptian generic verb forms have now been deciphered. Many have been actually observed. Others have been at least partly postulated or assumed. It is improbable that additional generic verb forms will be observed or postulated.

The generic and specific levels are intertwined through the following dynamic two-way process. The generic verb forms have been reconstructed from a large number of specific verb forms. This long process of decipherment is a topic in its own right. Many uncertainties, which would be worth detailing, remain. Once constructed out of specific verb forms, the level of generic verb forms functions as a tool for interpreting specific verb forms in texts. But many specific verb forms cannot be identified with certainty. Thus, although specific verb forms have made it possible to compile a virtually complete record of generic verb forms, the set of generic verb forms does not make it possible in return to identify every specific verb form with full certainty. Each unidentified specific verb form involves problems of its own. In sum, all the generic verb forms have probably been identified, but the identity of many specific verb forms remains uncertain.

THESIS 11: Towards a Complete Codification of the Arrangements Characterizing Visible Elements of Sound Pattern in the Verbal System

Definition: Many elements of the verbal system are not denoted in hieroglyphic writing. But the elements that do appear exhibit arrangements with other elements. These arrangements can serve to some extent as an empirical substitute for the elements that cannot be seen.

Due to the nature of hieroglyphic writing, the sound pattern of the verbal system is only partly accessible to observation. Yet, something else is also visible. Visible elements of sound pattern form arrangements with one other. These arrangements are undeniable facts. They have played an important role in the decipherment of the verbal system. They still play an important role in the analysis of texts. A complete codification of all these arrangements would be desirable. In the long run, such a codification is inevitable for a complete understanding of the verbal system. But the task is a very large one. It will not be achieved in this grammar.

A visible element of sound pattern can exhibit two principal types of arrangement in relation to other elements. First, it is preceded and followed by certain other visible elements. Second, other elements could conceivably appear in its place. These two types of arrangements can be defined as *relations* with other visible elements. Both types of arrangements have been and are being exploited in identifying generic verb forms and specific verb forms. The two types of arrangements are obviously Saussure's syntagmatic and paradigmatic relations.

As opposed to the visible elements themselves, arrangements of visible elements have a certain abstract quality. Observing the visible elements themselves is empirically more direct than observing arrangements between them. If all the elements of verb forms were visible in writing, the arrangements would have played less of a role than they have now. However, this role is inevitable. Students of Middle Egyptian therefore need to be pay more attention to arrangements or relations than students of most other languages.

THESIS 12: On the Substantive and What Is Substantival as Expressions of One Thing as opposed to the Adjective and What is Adjectival as Expressions of Two Things

Definition: The substantive denotes one thing, an entity, whereas the adjective denotes two things, an entity and a property. The same difference applies between substantival clauses and adjectival clauses.

In the Standard theory, much revolves around the three categories "substantival," "adjectival," and "adverbial." Within these three categories, "substantival" and "adjectival" are closely associated with one another and jointly opposed to "adverbial." "Substantival" and "adjectival" have something crucial in common on the level of concept that sets them apart from "adverbial." Both refer to entities. In addition, adjectives refer to properties. The difference between "substantival" and "adjectival" can therefore be

expressed in the most simple terms as one of number. What is substantival expresses *one* thing, what is adjectival expresses *two*. The fact that "substantival" and "adjectival" share much in *concept* is also reflected on the level of the sound pattern throughout the language.

The notion that an adjective such as an infert "beautiful one" (feminine singular) refers to two things is empirical. It is crucial to this grammar's organization. But it is not quite mainstream in the study of Middle Egyptian. Yet it has been defended on occasion. In his Studies in Egyptian Syntax (1924), at p. 142 note 4, Battiscombe Gunn suggests that Egyptian adjectives "may be regarded as substantives which are easily and commonly used in apposition to another substantive, with concord of gender and number," and he translates a generic example such as snfr as "a man – a good one." Polotsky develops the notion that adjectives mostly contain a reference to an entity at greater length in his "Transpositions" (pp. 5-6). Finally, leaving the field of grammar, it may be useful to quote the following statement by George Boole in his Investigation of the Laws of Thought (1854), at p. 27.

[The substantive and the adjective] may indeed be regarded as differing only in this respect, that the former expresses the substantive existence of the individual thing or things to which it refers; the latter implies that existence.

THESIS 13: On Absence of a Pause as an Inferred Empirical Marker of Adverbiality

Definition: Absence of a pause is a more satisfactory explanation than "virtuality" to account for the fact that so many types of strings of words can be either independent or dependent.

It is quite normal to assume in Middle Egyptian grammar, in stark contrast with the grammar of most if not all other languages, that many types of strings of words can be either independent or dependent. When dependent, they denote a circumstance of what precedes, functioning as adverbial clauses. In practical terms, this means that a single string of words could mean both "he was a child" and "when he was a child."

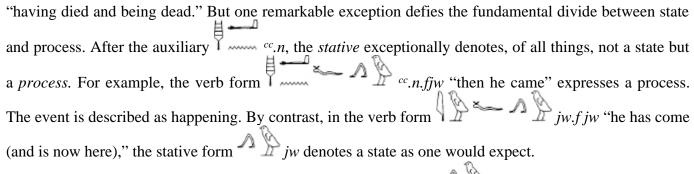
In a sense, independence and dependence are, as these terms indicate, completely opposite in meaning. Absence of one means presence of the other and *vice versa*. The most basic axiom of logic and philosophy, from Aristotle to Boole and beyond, is that something cannot at the same time have a certain property and not have that property. The countless transgressions of this principle in Egyptian grammar with regard to a property such as dependence are a cause for concern. One traditional solution has been to call an adverbial clause that resembles in every way an independent sentence a "virtual" adverbial clause. "Virtual" is an elusive concept. It allows something to exist and not exist at the same time. The doctrine of the "virtual" adverbial clause is not accepted in the present grammar. Instead, it is assumed that presence or absence of a pause empirically marked the difference between independence and dependence. The difference could only be heard in speech, not seen in writing. It is a fact that absence of pause does mark the dependence of certain strings of words in modern living languages. There is even circumstantial evidence in Egyptian pointing to the existence of absence of a pause.

[See "On the Empirical Distinctness of Certain Adverbial Clauses in Old and Middle Egyptian," *Chronique d'Égypte* 80 (1995) 18-33.]

THESIS 14: On One Case in Which the Stative Might not Seem to Denote a State and on Contiguity as the Explanation as to Why It Does Anyhow

Definition: The sharp distinction between state and process seems blurred by a case in which the stative, which otherwise always expresses a state, denotes a process, that is, the opposite of a state. Contiguity can be adduced as a concept to explain that, in this case too, the stative expresses a state, as one would expect.

No distinction is more fundamental in the verbal system than that between the state and the process. In a process, an event is described as happening. In a state, everything is at rest. The only verb form that unambiguously refers to a state is the stative. In addition to describing a state, it also implies a previous process. Thus, the stative of "come" refers to "having come and being here." The stative of "die" refers to



Upon closer inspection, however, it appears that the stative $\int_{-cc}^{cc} jw$ also expresses a state in $\int_{-cc}^{cc} n.f jw$. The verb form originally meant "(the fact) that he rose is (characterized by the circumstance of) him (already) having come." That soon did the coming occur after the rising that it seemed as if the coming had already happened. The two events are *contiguous*. The stative $\int_{-cc}^{cc} jw$ by itself expresses a state. The verb form $\int_{-cc}^{cc} n.f jw$ as a whole denotes a process. The concept of contiguity will also be applied outside this verb form.

[Conjunction, Contiguity, Contingency: On Relationships between Events in the Egyptian and Coptic Verbal

Systems (New York 1993) 117-200; "On the Stative Ending of the first to make the Lovaniensia Periodica 26 (1995) 21-27 at 27 note 16; "On Contiguity in Middle and Late Egyptian," Zeitschrift für ägyptische Sprache und Altertumskunde 124 (1997) 23-37 (p. 24 line 3, read new p. 24 note 3 line 3 read new p. 26 line 19 and p. 32 last line, read "mold"; the 5 occurrences of interlinear son pp. 34 and 35 are typographical mishaps); "Events Engaged in the Grammatical Tango of Contiguity: The Case of the Preposition r," Journal of the American Research Center in Egypt 35 (1998) 73-88; "Late Egyptian Sentences with Two Subordinate Clauses but No Main Clause," Lingua Aegyptia 7 (2000) 125-40; review of William J. Murnane's Texts from the Amarna Period in Egypt (Atlanta, Georgia 1995), in Journal of Near Eastern Studies 58 (1999) 311-13, at 312; review of Jacqueline Lustman's Étude grammaticale du papyrus Bremner-Rhind (Paris 1999), in Bibliotheca Orientalis 58 (2001) 80-83, at 82; The Other Mathematics: Language and Logic in Egyptian and in General (Piscataway, New Jersey 2008), pp. 187-207; "From "My Body" to "Myself" to "As For Me" to "Me Too": Philological and Digital Analysis of a Triple Shift in Egyptian," Journal of the American Research Center in Egypt 45 (2009) 247-90, at 255 note 14 (in line 6, for "invents" read "events"); "Contrastive jw.jr, Conditional jw.jr, Temporal jw.jr: On Separating a Grammatical Siamese Triplet," Akten der 8. Internationalen Konferenz für Demotische Studien (forthcoming), §6.]

THESIS 15: On jw as a Particle Referring to the Speaker at the Place and the Time of Speaking

Definition: The particle jw does not have assertive value or the like, as is now often assumed. It refers to the speaker at the time and place of speaking. This view is supported by its possible etymology. This etymology also accounts for the fact that jw occurs in some adverbial sentences and not in others.

It is now quite commonly thought that the frequent particle $\bigvee jw$ has assertive value of some kind. It adds a certain truth value to a sentence. Different terms have been used to capture this supposed nuance of the particle. It goes without saying that abstract notions such as assertiveness are in danger of being elusive.

If this theory of the assertive value of $\bigvee_{jw} jw$ is now very common, its origin seems to have been forgotten. The theory originated around the mid nineteen seventies. It is intricately intertwined with concepts such as subject and predicate. But these concepts are not accepted as empirically valid in the present grammar, as noted in Thesis 4 above.

The assertive value of jw was obtained by a line of reasoning that may be divided into five steps. This line of reasoning is nowhere made explicit, but it is the theory's undeniable origin. First, verb forms that are not preceded by the auxiliary jw at the beginning of a sentence are often both substantival and the initial member of an adverbial sentence. Verb forms following jw never are. These are facts. Second, substantival verb forms as first member of an adverbial sentence are traditionally considered the "subject" of the sentence. On the other hand, verb forms following jw are considered part of the "predicate." Third, a "subject" is thought to convey less important information than a "predicate." Fourth, since jw precedes a verb form that is part of the "predicate," it marks that verb form as containing more important information. Fifth, this marking is formulated as a kind of assertiveness.

A different theory is adhered to in this grammar for the meaning of jw. The point of departure of this theory is the following empirical fact. One cannot tell a story using jw. Others have noted that the particle jw relates a statement to the speaker at the time and the place of speaking.

To account for the absence of $\iiint jw$ from narrative chains of events, the following etymology is

suggested here. The particle derives from a substantival verb form of the verb jw "come," which expresses motion to the speaker. Other auxiliaries have a similar origin. No single English expression roughly corresponds to jw in meaning. Its approximate opposite is perhaps "once upon a time."

The present theory makes it possible to account for the peculiar fact that certain adverbial sentences tolerate *jw* whereas others do not. The particle *jw* can appear at the beginning of adverbial sentences whose first member is a substantive, as in the type *jw jt.j m dpt* "my father is in the boat." But *jw* does not appear in adverbial sentences whose first member is a substantival verb form, as in *jj.n.k n* "where do you come from?" At first sight, there is no reason why *jw* should appear in some adverbial sentences and not in others. However, if *jw* is itself in origin a substantival verb form, as was suggested above, then *jw* would be incompatible with another following substantival verb form. Other auxiliaries derived from verbs of motion or posture, such as the very common ^{cc}.n, are also incompatible with substantival verb forms because they are themselves substantival verb forms.

This etymology can also explain another undeniable fact about jw not discussed in the article cited below. In Middle Egyptian, one does not say *jw jb n s3.j 3w "the heart of my son is content" but rather always jw s3.j jb.f 3w, as has often been noted. There is no doubt that jb.f 3w is otherwise a subordinate adverbial clause with the meaning "his heart being content." If so, then it ought to be subordinate to something that precedes. What precedes is jw s3.j. This suggests that jw s3.j once had a meaning by itself as a main clause. In this connection, the articulation in the following example is also telling: "jw s3.j, "j.jn wsjr r ," "jb.f 3w" "'my son,' said Osiris about Horus, 'is content'" (Coffin Texts VI 157j-l). The independence of jw s3.j favors the thesis that jw was originally a verb form of jw "come." The expression jw s3.jjb.f 3w is then similar in structure to examples in which a substantival verb form of a verb of motion appears instead of jw, as in jj.n.j jm r.j spd "I came from there, my face being sharp" (Hatnub 10,7); šm.n.j c3 jb.j 3w "I left here, my heart being content" (Hatnub 22,19 and 32,3).

[For details, see "The Meaning of Jw in Old and Middle Egyptian in light of the Distinction between Narration and Discussion," Jerusalem Studies in Egyptology (Wiesbaden 1998) 30-31; see also "The Semantic Structure of jw-ei "come" and šm-bk "go," Essays on Egyptian Grammar (New Haven 1986) 22-30.]

THESIS 16: On Contingent Verb Forms and the Distinction between Condition and Premise

Definition: The fact that contingent verb forms can follow "if"/ "when"-clauses of condition but not "if"-clauses of premise more than anything narrowly and sharply focuses the function of these verb forms on dependency on conditions. "Consequence" is often used to describe these verb forms. But a consequence belongs traditionally more with a premise. There is no common term for what belongs with a condition. The time-honored technical grammatical term is apodosis. In logic, the apodosis of a condition is very different from the consequence of a premise.

A striking feature of Middle Egyptian is that it has verb forms that denote events whose occurrence depends on the occurrence of another event mentioned in the immediately preceding context. These verb forms contain the components r, k3, and jn. They are often preceded by a condition or "if'-clause. When no "if'-clause precedes, one can always be implied.

Several arguments can be adduced that associate the function of these verb forms narrowly with contingency, that is, dependency on conditions or "if"-clauses. But no argument focuses the function of these verb forms more firmly on the specific concept of condition than the obvious fact that certain "if"-clauses *cannot* precede contingent verb forms. A distinction is necessary between "if"/"when"-clauses of condition and "if"-clauses of premise. "If it is raining" in "if it is raining, I am staying inside" is a premise. As a *consequence*, I am staying inside." "When (if) it rains" in "when it rains, I stay inside" is a condition. It is irrelevant whether I am or am not staying inside. All I am saying is that, should it rain, I stay inside.

In Middle Egyptian, a condition is introduced by jr, a premise by jr wnn. Contingent verb forms cannot follow premises (jr wnn). This more than anything reveals the exclusive bond between these verb forms and the narrow concept of condition.

["The End of r=f sm=f in the Heqanakhte Letters," Revue d'Égyptologie 39 (1988) 204-8; "The Contingent Tenses of Egyptian," Orientalia 58 (1989) 1-27; review of Michael Green, The Coptic share Pattern and Its Ancient Egyptian Ancestors (Warminster 1987), in Chronique d'Égypte 65 (1989) 186-92; "Late Egyptian jnn, 'if,' and the Conditional Clause in Egyptian," Journal of Egyptian Archaeology 78 (1991) 69-78; Conjunction, Contiguity, Contingency (New York 1993) 201-55; "Condition and Premise in Middle Egyptian," Revue d'Égyptologie 46 (1995) 81-88; "Condition and Premise in Egyptian and Elsewhere and the Laws of Thought in Expanded Boolean Algebra," Zeitschrift für ägyptische Sprache und Altertumskunde 126 (1999) 126: 97-111.]

THESIS 17: On Saying as Little as Possible about Aspect

Definition: The discussion of aspect will be kept to a minimum owing to the difficulty of discerning positive empirical criteria favoring one theory over another.

One thing that verb forms do is relate events to the passage of time in various ways. The way that most readily comes to mind is the relation of events to the time of speaking. This is called "tense." Events can happen before, during, or after the time of speaking. But there are other ways in which languages would seem to relate events to time. Verb forms may describe an event as happening over a long span of time or happening at a point in time. These other ways are often denoted by the term "aspect." It has been noted above that, in the discussion on subject and predicate and related concepts, no two students of the problem define it in the same way. The same applies to the discussion of aspect in Middle Egyptian grammar. Many different and sophisticated meanings are attributed to a single verb form. But it is mostly not possible to discern positive empirical criteria that would favor one of these meanings over another. As a consequence, the discussion of aspect will be kept to a minimum.

THESIS 18: On the Omission of the Distinction between Morphology and Syntax

Definition: Following Saussure, the distinction between morphology and syntax will not be used in this grammar.

Grammars often distinguish between morphology and syntax. This distinction is not made in this grammar. In principle, morphology ought to be the analysis of all that is visible in terms of sound pattern, any single tidbit we can see in a text. Syntax is then the study of the arrangement or organization of these sound patterns in the sentence. However, sound patterns have concept or meaning attached to them. These meanings often make a statement about the arrangement of the sound patterns. It is often not possible to make statements about the meaning of an item of sound pattern without also making a statement about the arrangement of that item in relation to other sound patterns.

Morphology is the "study of forms." It owes its discreteness in large part to the learning process. In learning a new language, much effort is spent on storing the inventory of forms in one's memory. But the distinctness of this effort may falsely give the impression that morphology is a separate part of the structure of language.

ORGANIZATION

TEXTBOOKS often mix the different components of the grammar. A single lesson may contain something about verbs, something about nouns, and something about adverbs. The organizing principle of the lesson may not be the structure of the language but a topic of daily life. But in the present grammar, system receives priority. Paying attention to system matters more for Old and Middle Egyptian than for most languages. The reason is that hieroglyphic writing does not present the language fully. Some statements about the language therefore cannot be made on the basis of observable facts. They must be inferred. Reading Middle Egyptian requires much guess work. Consideration for system may make it possible to make this guess work into an organized endeavor.

It would be unreasonable for English speakers to expect to master Egyptian any faster than, say, Russian or Chinese. The amount of guess work resulting from the deficient script does not make the task any easier. There is no such thing as simply learning to read Egyptian. Hardly a sentence in the original texts is free of problems. A textbook of Middle Egyptian ought therefore not only to teach the language. It also ought to provide an adequate analytical tool for thinking clearly and distinctly about unresolved and unresolvable problems. For this reason, the articulation of this grammar follows considerations of system as much as possible. But for didactic purposes, the material is also subdivided into lessons that are followed by questions and exercises. The solutions to the exercises are provided at the end of this book to facilitate self-teaching.

The link between verb form and sentence type is central to the Standard theory. These two concepts are introduced in Chapters Four and Five. Chapters Four and Five are the pivot around which this grammar turns.

In addition to the pivotal position of the link between verb form and sentence type, this grammar's organization is determined mainly by the three way distinction between the substantive and what is substantival, the adjective and what is adjectival, and the adverb and what is adverbial.

Ideally, Chapter Four on sentence types would have been the first. As said earlier, nothing is more characteristic of Egyptian. But discussing sentence types requires prior knowledge. This prior knowledge is presented in Chapters One to Three. These three chapters form in a sense a prelude to Chapter Four.

Chapter One deals, not yet with the language, but with the hieroglyphic script. The study of the language proper begins after Chapter One. Chapter Two concerns substantives and substantival phrases and adjectives and adjectival phrases. Chapter Three is about adverbs and adverbial phrases as well as about pronouns. Chapters Two and Three provide the information necessary to introduce four of the five sentence types in Chapter Four: the substantival sentence, the adjectival sentence, the adverbial sentence, and the existential sentence.

Chapter Five introduces the verb. But Chapter Five is not about verb forms, but about verbal coordinates. That is, the chapter surveys all the characteristics that verb forms can have regardless of any specific verb form. This system of verbal coordinates should allow one to "locate" oneself in the verbal system, the most complex part of Middle Egyptian as it is of any language.

The description of the verb forms themselves begins in Chapter Six, the first chapter of what will be Part 2 of this grammar. There are four types of verb forms: substantival verb forms, adjectival verb forms, adverbial verb forms, and a fourth type that is none of the above. This fourth type will here be called independent verb forms.

Independent verb forms will be discussed in Chapter Six. Chapter Six also treats two related matters, verbal sentences and satellites of the verb. Independent verb forms are a necessary component of verbal sentences, the fifth sentence type. Verb forms are accompanied by one or more of the three types of satellites. The first satellite performs the action expressed by the verb form. The second satellite undergoes the action. Third satellites are circumstances in which the action occurs.

Chapter Six will conclude the survey of the five sentence types. The survey of clause types will begin with Chapter Seven. There are three types of clauses. Substantival clauses function like substantives. Adjectival clauses function like adjectives. Adverbial clauses function like adverbs. They will be discussed in Chapter Seven, Chapter Eight, and Chapter Nine respectively.

Clauses and sentences can be related to one another. Clauses and sentences both contain the elements

needed to express a complete thought. But even if clauses have all it takes to express a complete thought, they do not have the status of a complete thought. Rather, they are absorbed by another sentence or complete thought. Clauses are in a sense complete thoughts that are part of another complete thought.

Because clauses have all it takes to express a complete thought, one can think of each clause as corresponding to a sentence. Conversely, one can mostly conceive of each sentence as corresponding to three different clauses: a substantival clause, an adjectival clause, and an adverbial clause. On the whole, each clause corresponds to a sentence and each sentence corresponds to three clauses. This manner of viewing the relationship between clauses and sentences is very characteristic of the Standard theory.

Non-verbal sentences and verbal sentences can both be viewed as corresponding to clauses. Non-verbal sentences do not contain a verb form as a necessary component. Therefore neither do the clauses that correspond to them. Verbal sentences do contain an independent verb form as a necessary component. Therefore so do clauses corresponding to verbal sentences. Substantival clauses corresponding to verbal sentences contain substantival verb forms. Adjectival clauses corresponding to verbal sentences contain adjectival verb forms. Adverbial clauses corresponding to verbal sentences contain adverbial verb forms.

Verbal sentences relate to substantival clauses just as their independent verb forms do to substantival verb forms. Verbal sentences relate to adjectival clauses just as their independent verb forms do to adjectival verb forms. Verbal sentences relate to adverbial clauses just as their independent verb forms do to adverbial verb forms.

Chapter Seven will be concerned with substantival clauses and substantival verb forms. Only substantival clauses corresponding to verbal sentences contain substantival verb forms. Chapter Eight will be concerned with adjectival clauses and adjectival verb forms. Only adjectival clauses corresponding to verbal sentences contain adjectival verb forms. Chapter Nine will be concerned with adverbial clauses and adverbial verb forms. Only adverbial clauses corresponding to verbal sentences contain adverbial verb forms.

SCOPE AND GENRE OF THIS GRAMMAR

Many grammars of Middle Egyptian have appeared in recent Since my brief account of a wave of seven of them in Orientalia Lovaniensia Periodica 25 (1994), James Hoch has published one and Boyo Ockinga has updated Hellmut Brunner's Abriß in both German and English. Michel Malaise and Jean Winand have announced the publication of a grammar and rumors are circulating of four additional grammars of substance nearing completion. Erhart Graefe's is in its fifth edition. A new edition of Wolfgang Schenkel's has appeared in 1997.

What is the genre of the present grammar in relation to others? This is not a reference grammar. It has been presented above as an introduction to Middle Egyptian, and in many ways it is, although enabling students to read Middle Egyptian fluently is not the goal of this grammar because there is no such thing as reading Middle Egyptian fluently. But defining this work as an introductory textbook is not fully adequate either. Rather, it is perhaps best defined as a systematic analysis of the fundamental traits of Middle Egyptian. This analysis has been cast in the form of an introductory textbook (including exercises) for the sake of clarity and for ease of assimilation. In other words, this work *adopts* the style of a textbook rather than being one. Its primary purpose is not to be a textbook. For example, its length is not as much determined by didactic considerations as by its theoretical goals, as is most obvious from Chapter Five. Chapter Five is as long as the author felt was needed in light of the complicated subject matter.

In contrast with many grammars, the study on the verb does not begin with the simple sentence

sm sn "the brother hears." Not only does sm in this sentence never mean "hears." One also typically never speaks of "the brother" but rather of "somebody's brother."

As to level of detail, this grammar resembles somewhat the first scientific grammar of Middle Egyptian, Adolf Erman's gyptische Grammatik, which first appeared in 1894 and was translated that year into English by his student James Breasted. Three other German editions followed in 1902, 1911, and 1928. For more detail on Old and Middle Egyptian, the four standard reference grammars of Middle Egyptian are still those by Elmar Edel, Alan H. Gardiner, Gustave Lefebvre, and Wolfhart Westendorf.

SUNDRY REMARKS

Examples are mainly taken from texts dating to the time when Middle Egyptian was spoken. But Middle Egyptian was still written after it ceased being spoken. Some examples from these later texts are incorporated on the assumption that they illustrate features also existing in spoken Middle Egyptian. On this same assumption, a number of examples from Old Egyptian are also included. Some examples are generic, in spite of the danger involved in using such examples. The procedure seemed justified for the purpose of completing paradigms. The vocabulary of existing examples is occasionally simplified to allow better focus on new grammatical features. The sources of the examples are identified from Chapter Four onwards, when the study of the sentence types begins. But earlier examples are also either genuine or based on genuine examples.

This grammar deals with the structure of Middle Egyptian only. The cultural context of Middle Egyptian texts is not considered. As Ferdinand de Saussure observed around the turn of the century, against opinions prevailing at the time, the pure structure of a language has no necessary relation to the cultural context in which it is spoken. All languages can be used with equal efficacy by all peoples at all times in all circumstances. It is therefore possible to study the structure of a language independently of the culture.

As regards grammatical terminology, an attempt has been made to use only one term per phenomenon. Most grammatical terms are defined at their first occurrence as they are understood in this grammar. The terms and definitions are also listed alphabetically in Appendix V at the end of this grammar. These definitions are not final, only as sharp as I have been able to make them for the purposes of this project. Everything worth saying can be said increasingly more clearly.

The type of analysis has made this grammar rather long. The grammar may therefore only be useable in an intensive class or as subsidiary reading. But then, on the college level, languages that respect themselves and that are very different from English, such as Chinese, Japanese, and Russian, are taught for five or more hours per week. Such intensity might be desirable for Egyptian too, but desiring it is perhaps not realistic.

In working through the grammar with a class, a five-step cycle may be followed: (1) a portion of theory is assigned for study; (2) this portion is discussed in class and the corresponding exercise is assigned as homework; (3) homework is handed in or entered into a notebook for periodic checking by the teacher; (4) homework is returned and discussed; (5) a test is administered. The questions on theory in the exercises may relieve the teacher from stating everything explicitly in class. I also use these questions to define precisely what students need to know about the theory for a test. I ask no other questions than those. It is encouraging for the student to know what it takes to do well.

Two practices I consider useful in learning a new language are memorizing an example for each grammatical phenomenon and writing out phrases or sentences from memory after reading them, without necessarily memorizing them permanently.

In the preface to his grammar, Erman stated that the simultaneous acquisition of Coptic, as the best known stage of Egyptian, is indispensable for the study of Middle Egyptian. Coptic has since come to be more and more perceived as extraneous to the business of Egyptology. But it remains, I believe, a profitable pursuit for the student of Middle Egyptian.

This grammar's layout is inspired by Erman's grammar. One important difference is the use of word division, especially in the exercises. Word division is the norm in printing other ancient languages lacking it, such as Latin, Greek, and Coptic. Considering the degree of difficulty of script and language, it is surprising that the practice is so rare for Egyptian. As regards the transcription font, some improvements are expected for Part 2.

ACKNOWLEDGMENTS

THIS grammar owes much to the opportunities I had to teach Middle Egyptian at Yale from 1989, at Brown from 1991, and at Harvard in 1994-95. It is hoped that Part 2, "Links," will appear about two years after Part 1. I have prepared the text as camera-ready copy with WordPerfect 5.1 and 6.1, Corel

WordPerfect 7, Glyph 3.31, and WinGlyph 1.1. The book was produced from PostScript files by Sheridan Books (formerly BookCrafters) of Chelsea, Michigan and Fredericksburg, Virginia.

Much that is specific to individual writings of words and passages cannot be codified in a grammar. A reading-book ought therefore to accompany this grammar. But promising such a thing now would be precocious.

In countless cases, the traditional meaning or analysis of words or expressions has been adopted in this grammar. As our knowledge of Middle Egyptian progresses, many a matter of detail may become subject to refinement or correction.

For advice and support great and small and of many different kinds in relation to this project over the last decade, I thank Mark Arnold, Mariam Ayad, Azande, Mario Beatty, Laurel Bestock, Allen Callahan, Paul and Tansie Chapman, Mary Anne and Raleigh D'Adamo, Kelly Diamond, Stephen Emmel, Joshua Ewen, Florence Friedman, Peter Galison, Henry Louis Gates, Jr., Ann Gossett, Erhart Graefe, Martha Joukowsky, Joshua Katz, Jonathan Keiser, Jennifer Kimpton, Bentley Layton, Barbara and Leonard Lesko, Antonio Loprieno, Peter Machinist, Tracy Musacchio, Gregory Nagy, Francis and Susan Niedenfuhr, Theophile Obenga, Elizabeth Payne, Jan† and Lieve Quaegebeur, Janet and Nikita Romanoff (who made a contribution toward this book's publication) and Theodore Romanoff (who helped with some of the proofreading), David Silverman, William Kelly Simpson, Piotr Steinkeller, Mark Stone, Nghiem Thai, Stephen Thompson, William Ward†, Irene Winter, and Louis Zonhoven.

While guest-lecturing in 1988 at Yale where I was a graduate student, Jan Assmann of the University of Heidelberg encouraged me to write a synthesis of Middle Egyptian grammar suitable for self-teaching. James Allen of the Metropolitan Museum of Art, John Baines of the University of Oxford, John Huehnergard of Harvard University, and Wolfgang Schenkel of the University of Tübingen read much, most, or all of this Part 1 and saved me from many errors. Janet Johnson of The Oriental Institute of The University of Chicago and Ann Macy Roth of Howard University did the same and contributed useful observations resulting from teaching with excerpts of this Part 1.

Cambridge, Massachusetts and Providence, Rhode Island L.D. June 1998 and September 1999

ABOUT THIS REPRINT

THE REST OF THE PREFACE has been newly added to the original edition of this book published in 1999. The expansion consists of four parts. Part one is a general characterization of how this reprint differs from the original edition. Part two is a list of all the ways in which the present reprint differs from the original edition. Part three addresses issues raised in a review of the original edition. Some changes listed in part two are inspired by this review. Part four offers reflections and prospects in relation to the fact that the original edition was styled as the first of two volumes.

Comparison of This Reprint with the Original Edition

There are four larger changes in this reprint. But one is a restoration of something accidentally omitted and three of them are extraneous to the core contents of this textbook. The first change concerns the exercise accompanying Lesson 29. It was for some reason not printed on page 447 of the original edition. It is now.

The second larger change is the addition of a sample syllabus and a sample test as Appendix VIII and Appendix VIII respectively.

The third larger change concerns bibliography. The bibliographical references listed in this Preface have not been updated, with one exception, those pertaining to the concept of contiguity on pages lxvi-lxvii. I hold this concept to be a cornerstone of H.J. Polotsky's analysis of the Middle Egyptian verbal system. In Polotsky's analysis, there is much talk of substantival verb forms and adverbial verb forms. A sentence expressing contiguity combines the two. A generic example is *jj.n.j jr.n.j nn*, which literally means "It is after having done this that I have come" but freely translated corresponds to "No sooner did I come than I did this." The two signals (1) emphasis and (2) inversion of events are combined to denote two events that happen in quick succession. It has been stated in the review of the original edition discussed below (at p. 264) that I may be alone in holding on to the concept of contiguity. But I would like

to refer to the reactions compiled in *Lingua Aegyptia* 7 (2000) 127-30 (see p. lxx). Nor is Egyptian the only language in which one can outright invert the order of events to obtain the same effect. So is early modern German. There are good examples in the works of Friedrich Schiller and Thomas Mann (see *Journal of the American Research Center in Egypt* 45 [2009] 255 note 14 [see p. lxx]). These statements leave no doubt whatsoever that contiguity could be expressed by inversion of events in early modern German. Then why not also in Egyptian?

In the years since the original edition appeared, I have used it several times to teach beginning Egyptian at Brown University. Consequently, there has been much opportunity to spot errors, both on the part of my students and myself. Ms. Jean Cross also caught sight of about 15 and communicated them to me. The errata pertaining to pp. 451-559 and pp. 620–29 are owed to Paul Chapman, M.D. (personal communication of 7/27/2004), except one spotted by Ms. Cross.

All in all, the changes are fairly limited in number. Small or tiny alterations have been made to about 50 pages, in addition to the afore-mentioned restoration of the exercise on page 447. Many if not most changes are typographical in nature and most involve just one or two words or signs. These changes have on occasion led to slight alterations in the location of a page-break. In addition, more optimal page-breaks have been introduced in quite a few places, wherever it seemed opportune.

A detailed list of all that has been changed is provided below for the benefit of owners and users of the original edition.

These differences with the original edition do not appear plentiful enough to characterize the present book as a second edition or even as a revised edition. After all, the exercise on p. 447 is less an addition to this reprint than a restoration; it was for some reason mistakenly omitted in the original edition. Furthermore, the sample syllabus and the sample test added as Appendices VII and VIII are somewhat extraneous to the subject matter of the grammar. The present reprint is therefore called a "reprint with minor corrections." It is probably close in genre to what Adolf Erman called a "proofed reprint (durchgesehener Neudruck)" as a portrayal of the 1917 reprint of his booklet entitled Die Hieroglyphen (Berlin and Leipzig, 1912).

In the present addition to the original edition, the transcription font of the program Glyph is used. The mode of transcription used in the original edition was not entirely satisfactory. It is marked by the technological circumstances of the age in which it was produced. It would have been too complex, however, to convert all the transcriptions in this book into the Glyph font.

Two technical notes pertaining to the bibliographic history of this book are as follows.

First, the 10-digit ISBN number of the original edition of 1999 was 0-9674751-0-4. Meanwhile, 13-digit ISBN numbers have become the norm. The 13-digit ISBN number of the present book is 978-0-9674751-0-3. It is obtained by the addition of 978 in front and the conversion of the last two digits by means of an algorithm.

Second, the Library of Congress originally assigned the Control Number (LCCN) 99-75646 to this book. It is printed on the copyright page of the original edition of 1999. However, the Library later changed the number to 00687839, presumably when it appeared that the book was presented as volume one of a two-volume set.

List of Differences with the Original Edition of 1999

The following pages of the original edition have been affected by changes: [ii]; [iv]; xxxvi; xlvii; lxvii; lxviii; 99; 100; 102; 111; 117; 130; 141; 164; 173; 205; 207; 238; 250; 263; 264; 268; 276; 306; 320; 327; 353; 383; 388; 406; 407; 408; 447; 495; 497; 505; 531; 559; 574; 575; 576; 577; 578; 584; 588; 589; 599; 620; 626; 629; and 812. The roman page numbers of the Preface have increased by two owing to the addition of a dedication page. Pages affected by new page-breaks owed to these changes are not listed. Nor are pages that have new numbers owing to the insertion of items in the table of contents and owing to the insertion of the new Appendices VII and VIII.

The changes are follows: [p. ii] this page is now blank; [p. iv] the note about Frog Publishing has been rephrased; (xxxvi, 8) for "Shisha-Halevy" read "Ariel Shisha-Halevy"; (xlvii,24) for "makes it" read "makes its"; (lxvii,17-18) for "that he rose is while already having come" read "(the fact) that he rose is (characterized by the circumstance of) him (already) having come"; (lxviii, 14) for "73-88" read 73-88;";

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(99,17) for " read " calso commonly calso cal
discussed below, at p. 261); (100,3) for "heard said" read "heard or said"; (102,1) for "also expressed"
read "also be expressed"; (111,9) for " = " read " = "; (117,2) for " = " " (sr "plan") read "
         (srw \text{ "plans"}); (130, I-2) \text{ for "} j \text{ may be used instead of } j \text{ when the first person singular}
is a woman" read "\bigcup_{j=1}^{n} j may be used instead of \bigcup_{j=1}^{n} j from the New Kingdom onward when the first person
singular is a woman" (see the review of the original edition discussed below, at p. 261); (141,2) for
"feature of concept" read "concept feature"; (164[§3.66], 15) for "  

nr jmy.k" read "

jmy.k in  

nr jmy.k"; (173,3 [end]) for " read " "; (205,12) for "4.36"

read "4.38"; (207,11) for "difference two" read "difference between the two"; (238,12) for "use" read
nn ...js, perhaps also by n alone" (see the review of the original edition discussed below, at p.
262); (263,13-14) for "His name is not Mmj / Mmjjt" read "His / her name ..."; (264,20) for "The three
concepts" read "The three cases"; (268,11) for " \[ \int n3jj.f prw \] "his houses" ("the-of-him
                                                                                              n3jj.f \ n \ prw "his houses" ("the–of–him houses"), later without n"
(see the review of the original edition discussed below, at p. 262); (276,5) add "There is evidence dating
to much later than the Middle Kingdom in favor of the transcription N(y)-m^{y}t-R^{c} (see the review of the
original edition discussed below, at p. 261);(306,20) for "there is" read "there's no"; (320, left column, 13)
" wpt F13 SF top" has been added to the vocabulary; (327,7-8) excessive spacing between hieroglyphic
writings of st "son" has been removed; (353,14) for "read" "; (383, end) an example
has been added; (388,3) for "meaning the verb" read "meaning of the verb"; (406,1) after "jw.jstp.kw" add
 "I have been chosen" as line 2; (407,9) for "mk sy stp.stj" read "mk sy stp.tj"; (408,10) for "hear" read
 "choose"; (408) the title of section is now placed on one line; (447) for this change, see p. lxxxiii above;
(495,6-7) for \sqrt{y} | \sqrt{y}
chooses"; (497) first, the example wn.in.f r stp has been removed from § 5.285 because it was classified
there with verb forms exhibiting three component types even though, as observed at page 263 of the
review of the original edition discussed below, it in fact exhibits four; second, it is now stated that no verb
form exhibits the combination of three component types when the types are infix, preposition, and
auxiliary, and it is said why; (505,9) for "follows" read "precedes"; (531,20) for "The entity performs the
choosing and does not undergo it" read "The entity undergoes the choosing and does not perform it";
(559,5) for "INDIRECT" read "DIRECT"; (from 574,26 onward up to 578) these pages have been altered,
mainly by replacing with , in order to reflect Wolfgang Schenkel's finding, communicated in his
"Ramses: Die Erfindung einer Graphie in der Nacherzählung der Entzifferungsgeschichte der
Hieroglyphen," Göttinger Miszellen 191 (2002), 85-88, that, when Champollion found the key to the
decipherment of the hieroglyphic script in the writing of the name of Ramses II in the morning of
September 14,1822, he did not see the writing , as is generally assumed in accounts of the
decipherment, but rather \stackrel{\blacksquare}{=}, placed in a cartouche; (584,11) for "šesher" read "sheser"; (588,9 [end])
delete one set of the two sets of plural strokes; (588,11) for " 4 \times 10^{-10} \times 10^{-1
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"; (599,9) for "your smell is like Re" read "your smell is sweet like Re('s)"; (620,8 [example 7]) for "(5) c" read "(5) b"; (626,7 [example 12]) for "m.n." read "mm.; (629,2 [example 12]) for "jr.k.f" then he (masc. sing.) will do" "read "jr.k.k "then you (masc. sing.) will do" "; (812,29) for "—" read "o"

Remarks on a Review of the Original Edition

What follows addresses some of the concerns raised by Joachim Friedrich Quack in a thoughtful and informative review of the original edition that appeared in *Lingua Aegyptia: Journal of Egyptian Language Studies* 11 (2003) 259-265. The entire review is recommended reading.

One of Quack's concerns pertains to the considerable amount of white space found on each page of the original edition. He wonders whether this might not needlessly have pushed up the price of the book (pp. 260-61). What happened is as follows. When I typeset the book, I deliberately chose as text block size and page size exactly those of the first scientific grammar of Middle Egyptian, the first edition of Adolf Erman's $\ddot{A}gyptische$ Grammatik of 1894. When it was time to go to press, it appeared that the desired page size was technically not suitable. Instead, a standard American industry norm was recommended if not imposed, namely exactly half the size of the ubiquitous $8.5" \times 11"$ sheet. At that point, it was no longer feasible to change the size of the text block. Therefore, if anything, the additional white space may have made the production of the book cheaper.

Another concern pertains to my transcription of \mathbb{N} as jj. According to Quack (p. 261), this transcription offends the principle of using a distinct transcription symbol for each sound. Then again, I did follow a principle, but a different one.

As far as transcription is concerned, my focus was entirely on addressing a problem that has nothing to do with pronunciation. In many publications, including works on grammar, Egyptian hieroglyphic texts are cited only in transcription. However, readers may want to know exactly what is in the original hieroglyphic text.

The need arises to distinguish in transcription between the three closely related writings \,\ \ and \\. These three writings represent elements that entertain certain phonetic relations with one another. There have been many attempts to define these intricate relations. But the results of these attempts are in part speculative and divergent. This makes for a complexity that cannot possibly be summarized for beginning students in their first week of hieroglyphic Egyptian. Therefore, in transcribing, I have consciously avoided making theoretical statements about pronunciation.

An intuitive manner of transcribing that allows readers to infer easily from a transcription what is in the

transcribed hieroglyphs involves the simple fact that \(\) is twice \(\). Accordingly, if one decides to

transcribe $\$ as j, transcribing $\$ as jj comes natural. There is a one-to-one correspondence: one j for one reed. Transcribing otherwise would require one to wade into a complex problem of phonetics and phonology and to take sides in a debate characterized by divergent views promoted by a small group of students of the problem. All this leaves y as a suitable equivalent of $\$.

Phonetics is not without importance. But it seems to me that the number of professional Egyptologists in whose careers the in-depth study of the subject will play a role is small. In my opinion, the detailed study of the pronunciation of Egyptian is better postponed, perhaps even to as late as advanced seminars attended by graduate students and advanced undergraduates.

Quack (p. 261) describes the absence of much detail about phonetics and phonology in my textbook as a lack of "a deeper interest (ein tieferes Interesse)" on my part in the subject. When it comes to "interest," I was looking for what is of the most interest to the most beginning students, the greatest common denominator, which is being able to read and translate Middle Egyptian.

When one otherwise finds phonetics and phonology treated at length in a beginning grammar, chances are that the author of the grammar is "deeply interested" in the same subject and therefore assumes that everyone else is as well, or at least ought to be.

In transcribing \,\\\\ and \\\\\ , a degree of randomness seems unavoidable. In that regard, the solution proposed in this textbook is not perfect because no solution can be.

I do otherwise communicate the gist of some of what has just been said in class. And some reflection of it ought to have found its way into the original edition. But, at least, it now has in this reprint.

Quack (p. 26) believes that I am somewhat "stingy" with examples in the theoretical parts. However, the paucity of examples in the theoretical parts was also the result of a deliberate choice. Good examples illustrating specific points of grammar are often difficult to find, especially if one has a rigorous policy of never using examples that anticipate in any way what is only explained later in the textbook. What is more, one needs examples for the exercises. And another strict policy maintained in this textbook is to use only genuine examples in the exercises involving translation from Egyptian to English, except in certain drills. I therefore made the decision to move the bulk of the examples to the exercises. That makes the exercises into opportunities to review theoretical points. Also, the hope is that students will analyze examples more closely if they are part of homework (and will later be on the exam).

Also of concern to Quack is my transcription of the Egyptian word for "city" as *njwt* (elsewhere *niwt*). He notes that there is one consonant too many in this transcription because Elmar Edel has produced arguments that the word needs to be transcribed as "*nw.t* (or possibly *ni.t*) (*nw.t* (*oder allenfalls ni.t*))" (p. 261). Were I inclined to accept this proposal, I would still be faced with a choice between *nwt* and *njt*.

It is interesting to note that Edel wants to reduce the transcription *njwt* by a weak consonant. Hardly any grammarian of Egyptian is otherwise more generous when it comes to reconstructing the weak consonants "*j*" and "*w*" in all kinds of contexts.

What are the facts in this case? One critical fact is that the component *jw* is never written (see p. 79, note 1 below). It is a modern reconstruction. Personally, I prefer transcriptions in which as little as possible is reconstructed, for two reasons. First, a distinct benefit of such transcriptions is that one can always infer from them what is and what is not in the hieroglyphic original, especially as texts are very often cited only in transcription in all kinds of works. Every reconstructed *j* may leave the reader wondering what is actually in the text. Second, the reconstructions are often speculative or controversial. When it comes to highly theoretical and potentially controversial facets of Egyptian grammar, brief hints as to their existence should suffice in a beginning class. Otherwise, students might get the impression that one is trying to sell them something by arguing from authority, as they do not yet have the requisite knowledge to check things out for themselves.

What, then, was my motivation for *not* using the transcription *nt* according to the afore-mentioned principle? One reason is that the transcription *njwt* (*niwt*) is so widespread that I wanted students to be acquainted with it.

I realize that this solution is far from perfect. But the critical point is this. Quack's observation implies the assumption that a perfect transcription is possible. I have come to the conclusion over the years that it is not. And that is because transcription involves conventions.

It is at junctures like these that I have occasionally pointed out to students of beginning Egyptian that, according to Herodotos, war (here understood as strife) is the father of everything. And I then also refer to a lecture read in the early twentieth century at the University of Chicago by the great historian Eduard Meyer, who was visiting there, on "The Development of Individuality in Ancient History." The lecture is reprinted in his *Kleine Schriften* (1910), pp. 215-30.

Meyer describes how history is a never ending struggle between convention and innovation. I point out to the students that, while hardly being aware of it, we all automatically exhibit certain behaviors, grooming ourselves and dressing and talking like others have done before us. This is convention or tradition. Convention may be impossible to escape from. But it is also necessary to a degree. And it is even a major source of comfort and stability.

Then again, none of us think of ourselves as blindly aping the behavior of others. We think of ourselves as individuals whose behavior is unique and therefore in a sense also innovative. And to some extent,

every individual does innovate. Some of us innovate more than others. And some are quite rebellious in trying to shake off what seems like the stifling shackles of convention. But escaping entirely from convention and tradition is totally impossible.

In this struggle, convention and innovation can exert equal pull and the problem is finding an elusive equilibrium. On the one hand, transcribing *njwt* brings with it the comfort of doing things as most everyone else has done them before. This is the strong pull of convention. On the other hand, transcribing *nt* allows one to take pride in the boldness of making a principled stand. This is the strong pull of innovation.

Now, the point is simply this. There is no law of nature that tells us which of the two opposing forces ought to come out ahead. In that sense, life is led on the precarious cusp of tradition and innovation. The struggle between the two is what life and history are all about. It is, more generally, a struggle between sameness and difference. The transcription of Egyptian is just one tiny facet of this reality.

But there is one more consideration that has contributed to my eventual choice of the transcription *njwt*. The primary concern of scholarly prose style is drawing as little attention as possible to the mode of expression and as much as possible to the knowledge that is being communicated. In that regard, a striking departure from convention may needlessly draw attention away from the primary mission, which is to transmit knowledge. That is one reason why I would not use the honest transcription of the Berlin Egyptian dictionary, namely "nw.t? n.t?" The task at hand is to teach beginning students the word for "city" in Egyptian. Question marks might just interfere with the process.

Who knows, in the future, I may give in to the strong pull of innovation and transcribe *nt*, the transcription that I actually prefer. Or perhaps, Edel's *nwt* will get a chance. Or should it be *njt*?

Middle Egyptian Grammar beyond the "Elements"

This work was styled as part 1 of a two volume set. The present volume is entitled "Elements." The anticipated title of volume 2 is "Links." What are elements and what are links? In fact, why divide the analysis of Middle Egyptian grammar into two major components?

This division has everything to do with the specific nature of the grammar of Middle Egyptian as distinct from the grammar of most other languages. There is something truly unique about Middle Egyptian grammar. Many features of Middle Egyptian are presumably not expressed in hieroglyphic writing. The verbal system, which is the most complex component of Egyptian as of any language, is most affected by this incomplete presentation of the language by the script.

One way of looking at the division between what is here called elements and what is here called links is as follows. Gathered in the present volume entitled "Elements" is an analysis of all that not only is visible but also requires no assumptions of what is not.

It follows that most everything communicated in the present volume is safe, as it were, in that most grammarians would agree about most of what is said on pages 1-564. More details can be found in reference grammars. The Preface otherwise includes some of my own personal approach to the analysis of Middle Egyptian grammar. Some of this personal approach is also visible in the analysis of the verbal system found in pages 331-564. Still, this analysis is for the most part a detailed classification of what one can see of the verbal system. It is an answer to the question: What kinds of elements, called morphemes in linguistics, can one find in the verbal system? If one wants a complete answer to this question, then something like what is found in pages 331-564 is more or less what is needed. It lists and describes all the building blocks of the Middle Egyptian verbal system. It is the Lego set of the verbal system, as it were. As a result, what is said about the verbal system in the present volume is necessarily somewhat abstract and prefatory. What is analyzed is all that is visible. What is missing is the actual verb forms, the ways in which the building blocks can combine. The actual verb forms may be visible too. But a systematic presentation of them involves inferences about what is not visible.

In teaching, I basically use pages 1-329 for one semester and conclude the semester with some general impressions about the verbal system. The time that I spend on pages 331-564 in the second semester varies greatly. Sometimes, it is the basis for a mere first flyby of the verbal system. I have otherwise taught the verbal system in various different ways.

What about the links? The term evokes the notion that all kinds of relations between elements need to

be defined, especially as far as the verbal system is concerned. The elements are things. Relations are more abstract than things, yet no less real. Consider two chairs in a room. The two chairs are things. But they can be related spatially to one another in different ways. These relations are also real, yet somehow less tangible. Relations also exist between the elements of the verbal system. But because relations are less tangible, it is more difficult to conceive of them as real.

One thing is certain. Part 2, if it gets to be written, would need to look different from Part 1, and I do not yet know exactly how at this point. The remarks on pages lxxv-lxxvii concerning what Part 2 might look are now to be considered premature. Still, the overall structuring of the subject matter presented there remains valid. Any sequel to Part 1 may take the form of tools that may be helpful in teaching the Middle Egyptian verb. Preparatory work has been done. It will be tempting to produce a comprehensive method of teaching the relative verb forms and their relation to the passive participles. H.J. Polotsky called them "the cliff on which the ship of beginning Egyptian is in danger of running aground."

Because so much is in flux, it will not be possible to describe the verbal system independently from the history of Egyptian grammar. The need will be for bibliographical references. In the present volume, I could more or less avoid referring to the on-going discussion about, and study of, Middle Egyptian grammar because most of what is in the volume is generally accepted. That will not be possible in any sequel.

One example of the difficulties that one faces is the treatment of the *sm.f* formation. I personally believe that the *sm.f* formation encompasses nine typical *sm.f* forms in Middle Egyptian. By comparison, there are now a couple of grammarians on record who assume that there is only one. Just try to explain that to beginning students of Egyptian. Among grammarians who accept more than one *sm.f* form, I am so far the only one—as far as I know, at the time of writing—who has explicitly counted how many there are and laid out in detail how I obtain the number (see "Zu Lehr- und Lernbarkeit des mittelägyptischen Verbs: Wieviele typisch mittelägyptische *sm.f* Formen gibt es eigentlich? Neun!", *Methodik und Didaktik in der Ägyptologie* [Munich 2011], 481-508). I am not aware of any other grammarians who have developed a sense of how many there are. But if all grammarians were to put their cards on the table by committing to a fixed number and revealing exactly what motivated their choice of a number, it would be easier to compare divergent points of view and create more order in what is in danger of turning into pure chaos.

In any event, learning the elements of Middle Egyptian using this textbook leaves one free to imagine the verbal system according to any theory that might strike one's fancy.

* * *

Finally, on a personal note, the interval between the publication of the original edition in 1999 and the appearance of this reprint has been marked by the passing of my parents. This volume is dedicated to their memory. I do not think that the subject of Egyptology, let alone of Egyptian grammar, ever came up in our conversations and that is probably a good thing.

Norton, Massachusetts
July 2012

L.D.

INTRODUCTION EGYPTIAN LANGUAGE AND SCRIPT

1. The Egyptian Language

- **0.1** Egyptian is the language of ancient Egypt. It is no longer a living language. Modern Egyptians speak Arabic. Together with a large number of related languages in Western Asia and Northern Africa, ancient Egyptian forms the family of the Afroasiatic languages. Other branches of the Afroasiatic family are Berber and Semitic, probably also Cushitic, and perhaps also Chadic. Egyptian is the only language in its branch. Well-known members of the Semitic branch are Akkadian, Arabic, and Hebrew.
- **0.2** Egyptian was *both* written *and* spoken for 4000 years or so, from about 3000-2500 B.C.E. to about 1000-1500 C.E. In the course of these four millennia, the language changed considerably, as any language does over time. At least five stages are traditionally distinguished in the history of Egyptian: Old Egyptian, Middle Egyptian, Late Egyptian, Demotic, and Coptic.
- 0.3 One typically begins studying Egyptian by focusing on one stage. The stage traditionally chosen is Middle Egyptian. This is a grammar of Middle Egyptian. Middle Egyptian is also called Classical Egyptian, mainly for two reasons. First, it is the stage of Egyptian in which many important literary works were written. Second, when Middle Egyptian ceased being spoken, it remained in use as a literary and liturgical language taught in temples and schools. As a dead stage of the language, Middle Egyptian co-existed with the later, spoken, stages of Egyptian. This is a grammar of genuine Middle Egyptian, that is, spoken Middle Egyptian. Middle Egyptian was spoken in 2000 B.C.E. and some time before and after that. Later artificial Middle Egyptian differs from original spoken Middle Egyptian. The differences are due mainly to influence from the later, spoken, stages of Egyptian and to insufficient knowledge of what Middle Egyptian had been like.

2. Hieroglyphic Writing

- **0.4** In the first four stages of the language (Old, Middle, and Late Egyptian and Demotic), Egyptian was written with the hieroglyphic script. The unit of the hieroglyphic script is the hieroglyph. Coptic, the fifth stage of Egyptian, is written with the Greek alphabet, which is supplemented by a few characters derived from the hieroglyph script.
- 0.5 At least three types of hieroglyphic writing may be distinguished: the formal monumental hieroglyphic script (hieroglyphic proper), the hieratic script, and the Demotic script. Just as hand-written English differs from printed English, hieroglyphs written with a pen on papyrus differ from hieroglyphs carved or painted on tomb walls. Carved or painted hieroglyphs are hieroglyphic proper. "Hieroglyph" is after all Greek for "holy (hiero) carved character (glyph)." Pen-written hieroglyphs are called hieratic. In hieratic, the picture character of many hieroglyphs has become unrecognizable. "Hieratic" is Greek for "(script) of the priests." Clement of Alexandria called it so around 200 C.E. because, in his time, hieratic was used for religious purposes only. Hieroglyphic proper and hieratic are attested in the earliest documents. A third type of hieroglyphic writing, Demotic, is attested later, from about 600 B.C.E. onward. "Demotic" is Greek for "(script) of the people (demos)." The Demotic script evolved from hieratic. It is even more cursive than hieratic. Demotic is used to write the fourth stage of the language, which is also called Demotic. Demotic is therefore both a script and a stage of the Egyptian language. Hieroglyphic proper and hieratic script remained in use alongside the Demotic script, mainly for ceremonial and religious purposes.
- **0.6** The first four stages of the language relate as follows to the three scripts listed in § 0.5. Old and Middle Egyptian were written in hieroglyphic proper and in hieratic. Late Egyptian is attested mainly in hieratic. The Demotic language was written almost exclusively in the Demotic script.

0.7 It is customary to begin the study of Egyptian by focusing on hieroglyphic proper only. This grammar is no exception. Yet, many important Middle Egyptian texts are preserved in hieratic only. For the sake of convenience, hieratic texts are converted into hieroglyphic proper and it is these versions in hieroglyphic proper that beginning students study. Hieratic is studied later as a separate subject.

Students and scholars write hieroglyphic proper mostly with a pen. This is something Egyptian scribes rarely ever did. Hieroglyphic proper was carved with a chisel or painted with a brush. One used pens to write hieratic.

3. The Waning of Egyptian

- **0.8** The last dated specimens of hieroglyphic writing date to about 450 C.E. The hieroglyphic tradition had already been in strong decline since about 150 C.E. Between 200 and 300 C.E., the Greek alphabet was adopted to write Coptic, the final stage of Egyptian. The last person who could read hieroglyphic writing to any degree probably lived in the sixth or seventh century C.E. The ability to read hieroglyphic writing was completely lost around that time. In 1822, the Frenchman Jean-François Champollion restored this ability by deciphering the hieroglyphic script. The story of the decipherment is told in Appendix I (see pp. 565-78).
- **0.9** After hieroglyphic writing died out, the Egyptian language lived on in its latest stage, Coptic. About 640 C.E., Islam came to Egypt and Coptic was gradually replaced by Arabic as the spoken language of Egypt. Probably not too long after 1000 C.E., Coptic ceased being spoken. But the knowledge of Coptic did not vanish. Coptic manuscripts continued to be read and copied for liturgical purposes. Thus, while the knowledge of hieroglyphic writing became extinct, the language itself never did. It lived on in an evolved stage, the liturgical Coptic used in the Coptic church. The term Coptic has two meanings. It denotes the last stage of the Egyptian language and it is a synonym of Christian-Egyptian. The immediate past Secretary General of the U.N., Boutros Boutros Ghali, is a Copt. The Coptic language played a crucial role in the decipherment of the hieroglyphic script and the recovery of the earlier stages of the language.

QUESTIONS

1. To which family of languages does Egyptian belong? 2. Which are the five stages of Egyptian? 3. When was Middle Egyptian spoken? 4. Which are the three types of hieroglyphic writing and how do they relate to one another? 5. When did the knowledge of hieroglyphic writing become extinct? 6. In what way did the Egyptian *language* survive?

LESSON 1 (§§ 1.1–21)

CHAPTER ONE THE HIEROGLYPHIC SCRIPT

1. The Hieroglyphic Writing System

a. Egyptian Language and Hieroglyphic Script

1.1	Writing has no necessary connection to language. Thus, if Egyptian had been written with our
	alphabet, we could proceed immediately to the study of the language. But because Egyptian is
	written with hieroglyphic characters, the principles of the hieroglyphic writing-system need to be
	mastered before beginning with the language.

1.2 Learning Egyptian means learning both a new script and a new language. The cover of this book displays two expressions. One refers to the language, the other to the script. The expression

expression is transcribed r n Kmt . It is translated "language (r) of (n) Egypt (Kmt) ." The expression is transcribed $s3$ n $mdww$ nr . It is translated "writing $(s3)$ of (n) the words $(mdww)$ of the god (nr) ." This is how the Egyptians themselves referred to hieroglyphic writing, more precisely to hieroglyphic proper.
b. Hieroglyphs Referring to What They Depict and Hieroglyphs Referring to Sound
There are two main types of hieroglyphs. Some hieroglyphs denote the idea or concept depicted by the hieroglyphic picture. Other hieroglyphs refer to sounds. It is probably more accurate to state that hieroglyphs are used in two ways than that there are two types. Many hieroglyphs are used in both ways and therefore belong to both of the two main types.
An example of a hieroglyph referring to what it depicts is \square . It represents the outline of a house and is used to write pr "house." The word pr is pronounced conventionally as per (somewhat like "pair"). Hieroglyphic writing does not denote vowels. The arbitrary vowel e (as in beg) is inserted between consonants, or placed before single consonants, to make words pronounceable. This pronunciation is artificial.
An example of a hieroglyph referring to a sound is
sound <i>m</i> . The hieroglyph is used to write the word <i>m</i> (pronounced <i>em</i>), which means "in" and "from." The meanings "in" and "from" obviously have no relation to the picture of an owl. Hieroglyphic writing is mostly a mixture of these two types of hieroglyphs. Those referring to what one sees in the hieroglyphic picture are ideograms. Those referring to sounds are phonograms. Both types appear in <i>m pr.j</i> (pronounced <i>em peree</i>) "from my house." <i>j</i> equals "my." The stroke below is explained in the note to § 1.11.

c. The Structure of Words

phonograms.

1.5 The definitions of ideograms and phonograms require further refinement. But first, a remark on the structure of words is in order. A better understanding of the structure of words will allow a better understanding of how words are represented in hieroglyphic writing, whether by ideograms or by

1.6 We think of a word as *one* thing. But it is actually *two* things. Moreover, what makes a word a word is that these two things are as inextricably connected to one another as the two sides of a sheet of

paper. This fundamental property of language is described in more detail in Appendix VI.

1.7 Consider the word "horse." One thing is the concept we have of that animal. The other thing is the sound pattern *horse*. Or better: the chemical code inside the brain that instructs the speech organs to produce the sound pattern *horse*.

"HORSE" =

MENTAL CONCEPT of a horse

+

SOUND PATTERN of the word horse

1.8 What makes a word a word is neither a concept by itself nor a sound pattern by itself. Nor is it the two together. It is the *link* between the two inside the brain. English works as a language because all its speakers have stored the link between the concept of a horse and the sound pattern *horse* in their minds. But the connection between concept and sound pattern is not a necessary one. Thus, French speakers link a different sound pattern, *cheval*, to the concept of a horse. The concept is the same. The sound patterns *horse* and *cheval* differ.

d. Two Ways of Putting Words into Writing

1.9 The words of a language consist of two things that are inextricably linked, a concept and a sound pattern. Written symbols can therefore refer to either the concept or the sound pattern of a word. They cannot refer to the crucial link between the two. Most scripts, including our alphabet, refer to sound patterns only. Egyptian hieroglyphic writing is one of the few scripts whose signs refer to either a concept or a sound pattern. For example, \(\bigcup \) in pr "house" refers to the concept of a house.

It is called an ideogram. M in m "in" refers to a sound pattern. It is called a phonogram.

Note. — Hieroglyphic writing can be studied from two points of view. The historical point of view considers the invention of the script and how the script evolved. The invention could have been the work of a single person; an Alaskan by the name of Neck (*ca.* 1860-1924) invented a hieroglyphic script to write his Eskimo tongue. The synchronic point of view analyzes what it means to read and write hieroglyphs. The synchronic point of view is independent from the historical one: it is not necessary to know how the script evolved to be able to read or write it.

e. Ideograms

1.10 An ideogram is a hieroglyph that refers to the concept shown in its picture. "Ideogram" combines Greek for "outward appearance" (*idea*) and "written character" (*gramma*). Ideograms denote

entities readily accessible to the human eye and easy to draw. An example of an ideogram is f. It is used to write *ssmt* "horse" (pronounced ses(e)met). Another example is \Box (see § 1.4 above). \Box schematically depicts a house. It is used to write pr "house."

Note. — The vertical stroke is the so-called ideographic stroke. It apparently marks the co-occurrence of two facts. First, the hieroglyph it accompanies is an ideogram. Second, the word is written with one sign only (not counting the stroke). Hieroglyphic words are otherwise often written with more than one sign.

1.12 The ideograms above depict *complete* concepts. Others depict *parts* of concepts. Thus, is used to write *s3* (*sekah*) "write." It depicts the equipment of a scribe: palette, bag of pigments, and reed-holder.

f. Ideograms as Logograms

- **1.13** Ideograms are designed to refer to a concept. Thus, a refers to the concept of a head. But ideograms somehow also refer to the sound pattern, in this case *tp* ("head"). This is because concept and sound pattern are inextricably connected in words, like two sides of a sheet of paper (§§ 1.6-8). Hieroglyphs originally designed to refer to the concept of a word therefore *indirectly* also refer to its sound pattern.
- **1.14** The definition of the ideogram (§ **1.10**) may now be expanded. Ideograms are designed by the creators of hieroglyphic writing to refer to the concept of a word. But because words consist of a link between a concept and a sound pattern, ideograms also *indirectly* refer to the sound pattern of a word.
- 1.15 Ideograms refer *directly* to the concept of a word and *indirectly* to its sound pattern. In referring to both sides of a word, they refer to the whole word. Ideograms are therefore also logograms or word-signs. Logogram is Greek for "word" (*logos*) and "written character" (*gramma*). Consider in *pr* "house." Because it was designed to refer to the concept of a house, it is an ideogram. But because it also *indirectly* refers to a sound pattern, it is also a logogram.

g. Phonograms (Sometimes as Logograms)

- **1.16** Ideograms do not suffice. Many concepts are hard to draw. Phonograms supplement ideograms. Phonograms refer to the sound patterns of words. "Phonogram" is Greek for "sound" (*phone*) and "written character" (*gramma*).
- 1.17 Uniliteral phonograms refer to one consonant, like (mouth) r and (water) n. Biliteral phonograms refer to two consonants, like (a swallow) wr (pronounce wer). Triliteral phonograms refer to three consonants, like (a swallow) wr (pronounce wer). All uniliteral phonograms are listed in § 1.24. The most important biliteral and triliteral phonograms are listed in § 1.29-30.
- 1.18 Phonograms are created to refer to the sound pattern of a word. But they *sometimes* also *indirectly* refer to its concept. If so, they refer to the whole word. They are then also logograms or word-signs. Ideograms are always also logograms (§ 1.13). But phonograms are also logograms only when they refer to a *complete* sound pattern. Phonograms then refer to the whole word because *complete* sound patterns are attached to concepts. *Parts* of sound patterns are not. The same phonogram may or may not also be a logogram. Thus, refers to a *complete* sound pattern in refer to the concept "toward." It therefore also *indirectly* refers to the concept "toward." It is then also
 - a logogram. But r refers *only* to *part* of a sound pattern in r "name" (pronounce r en). In this case, r is just a phonogram, not also a logogram.
- **1.19** Like ideograms, phonograms are pictograms. They are pictures of things. But only ideograms refer to what is seen in the picture. Thus, depicts a mouth. As an ideogram, it is used to write r "mouth." The ideogram refers to what is seen in the picture (and *indirectly* also to the sound pattern r). As a phonogram, refers to the sound r, as in r "toward" and rn "name." The phonogram does not refer to what is seen in the picture. But it is nevertheless a picture and can therefore be called a pictogram.

h. From Ideograms to Phonograms: Rebus Writing

- **1.20** Ideograms and phonograms are two distinct types of hieroglyphs (or better: two distinct functions of hieroglyphs). But the two types are related. Phonograms derive from ideograms. The principle of derivation is rebus writing. Rebus writing occurs in most hieroglyphic words. How does it work?
- **1.21** First, ideograms were created to refer to the concepts of words (§ 1.10). Second, because concepts

and sound patterns are linked, ideograms *indirectly* also refer to the sound patterns attached to the concepts of words (§ 1.13). Third, as pictures of things, hieroglyphs are naturally suited to be ideograms. The pictures refer to concepts. However, fourth, ideograms can be *detached* from their reference to the concept depicted while retaining their *indirect* reference to the sound pattern attached to that concept. The *direct* reference to the concept seen in the hieroglyphic picture becomes inert. The *indirect* reference to the sound pattern attached to that concept remains active. Fifth, these "detached ideograms" are now available to refer to all or part of the sound pattern of words whose concept cannot be drawn as a picture of a thing. Ideograms have been converted into phonograms.

Thus, English "I" is hard to write with the picture of a thing. But "I" sounds like "eye." The picture of an eye can therefore be used to write "I." is *detached* from its reference to the concept of an eye. But it retains its *indirect* reference to the sound pattern *eye* that is attached to the concept of an eye. Likewise, Egyptian r "toward" is hard to write with the picture of a thing. But r "toward" sounds like r "mouth." The picture of a mouth can therefore be used to write r "toward." is *detached* from its reference to the concept of a mouth. But it retains its *indirect* reference to the sound pattern r that is attached to the concept of a mouth. In this same way, all phonograms owe their existence to rebus writing.

Why the name "rebus" writing? *Rebus* is Latin for "with (pictures of) things." Normally, only words whose concepts can be depicted in a drawing can be written with pictures of things, that is, with hieroglyphs. An example is r "mouth." But in rebus writing, words whose concept cannot be depicted in a drawing can also be written with pictures of things or, in Latin, *rebus* "with (pictures of) things." An example is r "toward."

In sum, rebus writing is writing word A by depicting the concept of word B whose concept is attached to the same sound pattern as the concept of word A. Rebus writing addressed a real need. Hieroglyphic writing consists entirely of pictures of things. But the concepts of many words cannot be drawn with pictures of things. Rebus writing made pictures of things also available to write those many other words.

QUESTIONS

1. What are the two main types of hieroglyphs and how do they differ? 2. Which duality do words display? 3. Why do ideograms also refer to a sound pattern? 4. Why can ideograms be called logograms from a certain point of view? 5. What are the different types of phonograms? 6. How are phonograms derived from ideograms?

LESSON 2 (§§ 1.22–26)

2. Uniliteral Phonograms and the Sounds of Egyptian

- **1.22** About half of the hieroglyphs in any text are uniliteral phonograms. Memorizing uniliteral phonograms is therefore essential. They are listed in § 1.24. Comments follow in §§ 1.25-26.
- **1.23** The uniliteral phonograms represent all the consonants of Middle Egyptian. One therefore learns the consonants together with the uniliteral phonograms.

The uniliteral phonograms represent all the known sounds of Middle Egyptian (vowels are not written). They are therefore often called the "alphabet" of Egyptian. But the term "alphabet" is not used properly. Uniliteral phonograms are not the only symbols of hieroglyphic writing. But alphabetic signs are in alphabets.

Note. — Egyptian could conceivably have been written with uniliteral phonograms alone. However, the many other signs were never discarded. One thing is certain. Hieroglyphic writing would be more often ambiguous than it already is now if only uniliteral phonograms had been employed.

1.24 UNILITERAL PHONOGRAMS (THE "ALPHABET")

phonogram transcription pronuncia school anci				object depicted
₩ G1'	3^{2}	ah	r or l^{-3}	vulture
N 17	j^4	ee / (y)i	glottal stop ⁵	flowering reed
∏ _{M17–M17}	jj ⁶	ee / (y)i	y as in yes	two flowering reeds
\\ Z4	У	ee / (y)i	y as in yes	two strokes
D36	C 7	ah	like Arabic ^C ayin	arm
∯ G43	w	00 / w	w as in waw	quail chick
J D58	b	b	b as in bib	foot
□ Q3	p	p	p as in pop	stool
≤ 19	f	f	f as in fife	horned viper

¹ Number in Gardiner's sign-list (pp. 24 [5] and 736-74).

²For 3. The number 3, which is similar in shape, is used here. But 3i will be used in Part 2.

³ Later became a glottal stop (see note 5).

⁴In other works also transcribed *i*.

⁵The catch in the throat heard, for example, in the middle of "uh-oh!"

⁶ Elsewhere also y. This sign and the next are mostly found at the ends of words.

⁷For c. Raised *C* is used here. But will be used in Part 2.

UNILITERAL PHONOGRAMS (THE "ALPHABET")

phonogram		n pron school		object lepicted
M G17	m	m	m as in mom	owl
N35	n	n	n as in nun	water
D21	r	r	r (rolling?)	mouth
□ 04	h	h	h as in hid	courtyard
	ḥ	h	Arabic <i>ḥ</i> ? '	wick
⊜ Aa1	b	k	ch in Scott. loch?	placenta?
⇔ F32	\dot{h}	k	ch in German ich	? animal's belly
⊸ O34	\mathcal{S}^{2}	s	s as in sister 3	doorbolt
S29	s 4	s	s as in sister ³	folded cloth

¹ Like *h*, but with characteristic friction in throat.

UNILITERAL PHONOGRAMS (THE "ALPHABET")

 $^{^2}$ Also z.

³O34 and S29 in origin differed in sound, but they had merged by Middle Egyptian.

⁴Also .

phonogram	transcripti	on pro school	onunciation ancient	object depicted
N37	š	sh	sh as in shut	pool
∠ N29	q (ķ)	k	like Arabic q ? I	hill
∨31	k	k	k as in kick	basket with handle
△ W11	g	g^2	g as in goggle	jarstand
△ X1	t	t	t as in tot	loaf
8── V13	<u>t</u> ³	ch	ch as in church?	tethering rope
□ D46	d^4	d	d as in did 5	hand
110	d^{ϵ}	j	j as in jazz? ⁷	cobra

¹ Pronounced further back in the mouth than k. Others believe it sounded like "ejective" k in modern Amharic.

1.25 The table in § 1.24 lists seven characteristics for each uniliteral phonogram:

- (1) its hieroglyphic symbol;
- (2) its transcription (or transliteration);
- (3) its modern school pronunciation;
- (4) its location in the "alphabetical" sequence;
- (5) its letter-number designation in Gardiner's sign-list;
- (6) its probable ancient pronunciation;
- (7) the object depicted by its hieroglyphic symbol.

The relation between (1) and (2) needs to be memorized. Familiarity with (3) and (4) results naturally from making the exercises and looking up vocabulary in the word-lists. No more than a superficial acquaintance of (5), (6), and (7) is necessary.

(1) Shape of the hieroglyph (first column in the table in § 1.24). — Egyptologists writing hieroglyphs with a pen use simplified line-drawings imitating the shapes of chiseled hieroglyphs. Good models for drawing hieroglyphs with a modern pen are found in Henry Fischer's Ancient Egyptian Calligraphy. In developing a hieroglyphic hand, four principles are worth keeping in

²Hard as in gasp.

³Also transcribed.

⁴Also transcribed.

⁵Or perhaps like "ejective" t in Amharic.

⁶Also transcribed **¢**.

⁷Or perhaps like "ejective" *ch* in Amharic.

mind. They are, in order of importance: clarity, distinction, consistency, and aesthetic quality. First, hieroglyphs should be clearly recognizable to fellow readers. Second, hieroglyphs should be sufficiently distinct from one another to avoid confusion. Third, hieroglyphs should be consistently drawn in the same way. Lack of consistency evidences sloppiness in execution. And sloppiness in execution always suggests—even if not necessarily implies—sloppiness in thinking. Only in fourth place comes attention to aesthetic quality. Drawing hieroglyphs otherwise leaves much room for individual creativity. There are also never-ending opportunities for improvement. Hieroglyphic computer fonts have made a good hieroglyphic hand no longer indispensable.

(2) Transcription (transliteration): Turning signs into sounds (second column). — The hieroglyphic script consists of many hundreds of hieroglyphs. But all these signs represent combinations of only about 25 distinct consonants. To transcribe hieroglyphic texts means to convert all the hieroglyphs into symbols representing those 25 consonants.

Note. — The letters and symbols used to transcribe hieroglyphs reflect partly outdated nineteenth-century theories about the pronunciation of Egyptian. What matters, however, is not necessarily how consonants exactly sounded, but *how many* there are and that they were *distinct* from one another. In this respect, the partly outdated symbols remain amply adequate.

Four diacritic marks require attention. Their pronunciation is presented in the table in § 1.24 above.

- "hachek" (little "v" on top of the letter) in \check{s}
- · dot below the line in
- half-circle below the line in
- horizontal stroke below the line in , , and

Note. — Transcription is first about converting hieroglyphic writing into letters and symbols that represent sound. But transcription accounts for more than just sound. Spaces separate words from one another (there is no word division in hieroglyphic writing). Symbols such as dots divide words into their components.

(3) MODERN SCHOOL PRONUNCIATION (third column). — Some Egyptian sounds are difficult to pronounce for speakers of English. The pronunciation of yet other sounds is not known with certainty. Furthermore, vowels are not written. For all these reasons, a conventional school pronunciation is used to pronounce Egyptian in class. This standard school pronunciation agrees only in part with the ancient pronunciation. Egyptians would probably not recognize our pronunciation as their own language.

Two main principles govern school pronunciation. The first is that 3, j, jj, c, and w are pronounced as vowels, even though they are really consonants. The pronunciation of 3, j, jj, c, and w as vowels reflects a nineteenth-century theory that these sounds were vowels. This theory has long been proven wrong. But the pronunciation of the sounds as vowels has been retained for practical purposes. The second principle is that a generic e (as in bet) is inserted between consonants wherever necessary. Apart from these two main principles, there are other minor conventions. These conventions may differ from one Egyptological school to another and even from one Egyptologist to another.

- (4) LOCATION OF THE SOUNDS IN THE "ALPHABETICAL" SEQUENCE.— The order of the signs in § 1.24 is modern. It is necessary to know this order because it is used to "alphabetize" words in dictionaries.
- (5) LETTER AND NUMBER DESIGNATION IN THE GARDINER SIGN-LIST (placed next to the hieroglyphs in the first column). This designation has been universally adopted. The Gardiner sign-list is found in Alan H. Gardiner's Egyptian Grammar (1927¹, 1950², 1957³). To the practicing Egyptologist, a sign-list is like a second dictionary. It is consulted constantly. The Gardiner list contains about 700 signs. An abbreviated version of this list is included in this grammar (see pp. 733-74). It contains

all the signs found in this grammar with the functions that they exhibit in this grammar. It is not necessary to memorize all these signs now. But it is useful to be familiar with how the list is organized. And it is advisable to memorize at least the 26 uniliteral phonograms in § 1.24 and the 67 biliteral phonograms and 9 triliteral phonograms in §§ 1.29-30, for a total of 102 signs.

- (6) APPROXIMATE ANCIENT PRONUNCIATION(fourth column). This reflects modern theories on the pronunciation of the sounds.
- (7) OBJECT DEPICTED BY THE HIEROGLYPH(fifth column). In some instances, the sound value of a hieroglyph is known, but the object depicted by the hieroglyph has not been identified. The Gardiner list classifies such hieroglyphs in the category Aa ("Unclassified").
- **1.26** Four remarks on uniliteral phonograms are in order. First, $\sum w$ is also written $\sum z^7$. $\sum w$ is the hieratic equivalent of $\sum w$. Hieratic $\sum w$ has been incorporated into hieroglyphic proper.

Second, m can also be written or m, a combination of m and m. In this combination, m is often not transcribed. The assumption is that m was not pronounced in this combination. Or perhaps it specified the pronunciation of m in some unknown way.

Third, the sound n can also be written s_3 , depicting the royal crown of Lower Egypt.

Fourth, the sounds \Longrightarrow and \bigcirc evolved into \bigcirc t and \Longrightarrow d. Because this evolution is on-going in Middle Egyptian, many words containing these sounds are found spelled with \Longrightarrow or \bigcirc and with \bigcirc or \Longrightarrow .

QUESTIONS

- 1. Why is it important to memorize the uniliteral phonograms?
- 2. What is un-Egyptian about the way we draw hieroglyphs today?
- 3. What are four principles worth observing in drawing hieroglyphs?
- 4. Which two principles mainly govern the school pronunciation of Egyptian?
- 5. Why is knowing the modern order of the uniliteral phonograms necessary?

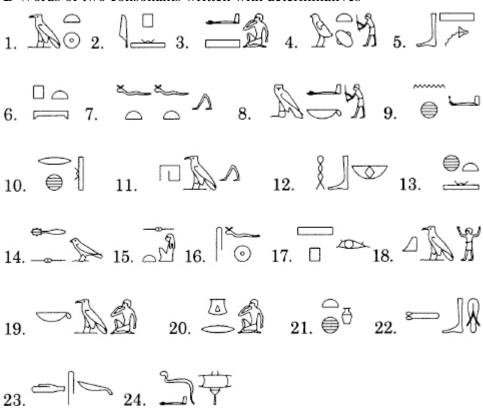
EXERCISES IN TRANSCRIBING UNILITERAL PHONOGRAMS (THE "ALPHABET")

A Words written without determinatives¹

1.
$$\bigcirc$$
 2. \bigcirc 3. \bigcirc 4. \bigcirc 5. \bigcirc 6. \bigcirc 7. \bigcirc 8. \bigcirc 9. \bigcirc \cdot\ 10. \bigcirc 11. \bigcirc 12. \bigcirc 13. \bigcirc 14. \bigcirc 15. \bigcirc 16. \bigcirc 17. \bigcirc 18. \bigcirc 19. \bigcirc 20. \bigcirc

¹ For determinatives, see the note on p. 27 below.

B Words of two consonants written with determinatives¹



¹ Determinatives are discussed in § 1.34 below. They denote neither the sound pattern nor the concept of a word, but rather the general class of its concept or meaning. Determinatives are included here only to show the words in their full writings. Some common determinatives are listed in § 1.35. All the determinatives are identified in the answer key to this exercise (from p. 579 onward) by their letter and number in the Gardiner sign-list. Using these numbers, one can also locate the determinatives in the abbreviated version of the Gardiner list provided at the end of this book (see pp. 733-74).

C Words of three consonants written with determinatives

LESSON 3 (§§ 1.27–29)

3. Biliteral Phonograms

- **1.27** Biliteral phonograms are hieroglyphs representing sequences of two consonants. 67 common biliteral phonograms are listed in § 1.29. They are subdivided into five groupings, two of 14 phonograms and three of 13 phonograms.
- **1.28** Five remarks on the biliteral phonograms listed in § 1.29 are in order.

First, the alternation between and d witnessed in the pairs w/wd, c/cd, d, and w/dw further evidence the evolution from to d also described at the end of § 1.26 above.

Second, one biliteral phonogram may refer to two different sequences of consonants. Thus, \mathbb{I} refers to either 3b or mr.

Fourth, some hieroglyphs are composites of other hieroglyphs. Examples are \bigcirc nw and + + nn.

Fifth, some hieroglyphs may rotate. Thus, = c3 also appears as and mr also as ...

1.29

BILITERAL PHONOGRAMS (FIRST GROUPING)

phonogram	transcription	object
	(with school pronunciation)	depicted
₽ F40	3w (ah-oo)	portion of backbone
U23	3b (ahb)	chisel
E9	jw (eeoo)	newborn hartebeest
Aa15	jm (eem / yim)	a part of the body?
⇔ Kı	jn (een / yin)	a kind of fish
□ D4	jr (eer / yir)	eye
M40	js (ees / yis)	bundle of reeds
- or Î O29	$^{\it C}3$ (ah-ah)	wooden column
× V26	$^{\it C}\!\!\!\!\! d$ / $^{\it C}\!\!\!\!\! d$ (ahj / ahd)	netting needle
€ V4	w3 (wah)	lasso
≤\$ E34	wn (wen / oon)	hare
₩ F13	wp (wep / oop)	horns
€ G36	wr (wer / oor)	swallow
V24 or V25	wd / wd (wej / ooj) cord wound on stick

BILITERAL PHONOGRAMS (SECOND GROUPING)

D	ILITERAL PHONOGRAMS (SI	ECOND GROUPING)
phonogram	transcription	object
	chool pronunciation)	depicted
€ G29	<i>b3</i> (bah)	jabiru
─ F18	bh (beh)	tusk of elephant
K , K G40, G41	p3 (pah)	duck flying, landing
C 01	pr (per)	house
→ U1	m3 (mah)	sickle
	mj (mee)	milk-jug in net
Y5	mn (men)	game-board
or Tu6	mr (mer)	hoe
U23	mr (mer)	chisel
₩ V22	$m\hbar$ (meh)	whip
₩ F31	ms (mes)	three skins tied
₩ G14	$mt ext{ (met)}$	vulture
─ D52	mt (met)	phallus
Ō W24	nw (noo)	bowl

BILITERAL PHONOGRAMS (THIRD GROUPING)

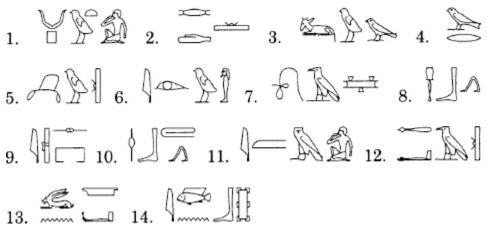
phonogram	transcription	object		
	h school pronunciation)	depicted		
O U19/W24	nw (noo)	adze, bowl		
─ V30	nb (neb)	basket		
∯ T34	nm (nem)	butcher's knife		
1 M22 twice	nn (nen)	two rushes		
à G21	nh (neh)	guinea-fowl		
F20	ns (nes)	tongue of ox		
Aa27	$n \dot{q}$ (nej)	?		
€ E23	rw (roo)	recumbent lion		
M16	h3 (hah)	clump of papyrus		
□ N41	hm (hem)	well full of water		
M2	hn (hen)	herb		
	$\hbar r$ (her)	face		
₩14	hs (hes)	tall water-pot		
	BILITERAL PHONO	BILITERAL PHONOGRAMS (FOURTH GROUPING)		
phonogram (wi	transcription th school pronunciation)	object depicted		
-	transcription	object		
(wi	transcription th school pronunciation)	object depicted		
(wi	transcription th school pronunciation) $hd \mid hd \text{ (hej / hed)}$	object depicted mace		
(wi ↑ T3 ♣ M12 — M3 ← K4	transcription th school pronunciation) hd / hd (hej / hed) $h3$ (kah)	object depicted mace lotus		
(wi ↑ T3 ↑ M12 — M3 ← K4 ↑ D33	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket)	object depicted mace lotus branch		
(wi T3 M12 — M3 — K4 → D33 G39	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket) h3 (kah)	object depicted mace lotus branch oxyrhynchus fish		
(wi ↑ T3 ↑ M12 — M3 ← K4 ↑ D33	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket) h3 (kah) hn (ken)	object depicted mace lotus branch oxyrhynchus fish arms rowing		
(wi T3 M12 — M3 — K4 → D33 G39	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket) h3 (kah) hn (ken) s3 (sah)	object depicted mace lotus branch oxyrhynchus fish arms rowing duck		
(wi T3 M12 M3 K4 D33 G39 △,	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket) h3 (kah) hn (ken) s3 (sah) s3 (sah)	object depicted mace lotus branch oxyrhynchus fish arms rowing duck lid of a box?		
(wi T3 M12 M3 K4 D33 G39 △,	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket) h3 (kah) hn (ken) s3 (sah) s3 (sah) sw (soo)	object depicted mace lotus branch oxyrhynchus fish arms rowing duck lid of a box? a plant two-barbed		
(wi T3 M12 M3 K4 D33 G39 △,	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket) h3 (kah) hn (ken) s3 (sah) s3 (sah) sw (soo) sn (sen)	object depicted mace lotus branch oxyrhynchus fish arms rowing duck lid of a box? a plant two-barbed arrow-head		
(wi T3 M12 M3 K4 D33 G39 △, ☐ Aa17, Aa18 M23 T22 V29	transcription th school pronunciation) hd / hd (hej / hed) h3 (kah) ht (ket) h3 (kah) hn (ken) s3 (sah) s3 (sah) sw (soo) sn (sen) sk (sek)	object depicted mace lotus branch oxyrhynchus fish arms rowing duck lid of a box? a plant two-barbed arrow-head swab		

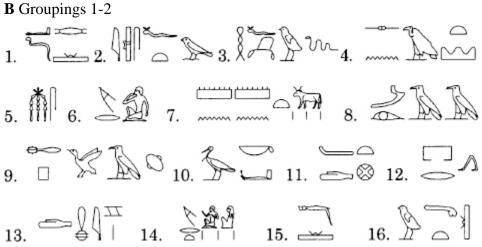
BILITERAL PHONOGRAMS (FIFTH GROUPING)

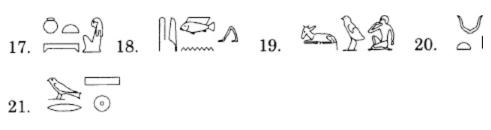
phonogram	transcription (with school pronunciation)	object depicted
ŏ v ₆	šs (shes)	cord
₩ F30	$\check{s}d$ (shed)	water-skin
Aa28	qd (ked)	tool for building?
□ D28	k3 (kah)	arms extended
<i>≥</i> 16	km (kem)	crocodile-skin
→ G28	gm (gem)	black ibis
☐ U30	t3 (tah)	potter's kiln
∂ U33	tj (tee)	pestle
₩ U15	tm (tem)	sledge
₿ G47	t3 (chah)	duckling
Ŭ U28	d3 (jah)	fire-drill
№ N26	dw / dw (joo / doo)	mountain
₩36	dr (jer)	bundle of flax

Exercises in Transcribing Biliteral Phonograms

A Grouping 1





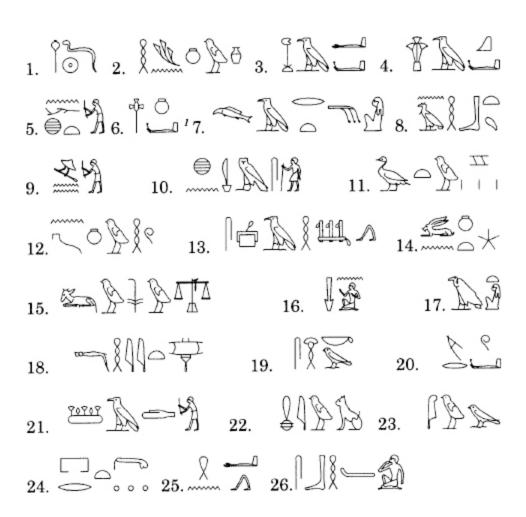


C Groupings 1-3



¹ The function of the sign ^Ō W²⁴ is not clear.

D Groupings 1-4



¹ See note 1 on page 37.

E Groupings 1-5

LESSON 4 (§§ 1.30–33)

4. Triliteral Phonograms

1.30 Triliteral phonograms represent three consonants. Common ones are as follows.

phonogram	transcription	object depicted
Y S34	$^{C}n\dot{h}$ (ahnk)	?
₽6	${}^{\it C}h^{\it C}$ (ah-hah)	mast
V29	w3h (wah-h)	swab
F12	wsr (weser)	head, neck of canine
∦ ⊗ F35	nfr (nefer)	heart and windpipe
S38	hq3 (hekah)	crook
A R4	htp (hetep)	loaf on reed-mat
谷 L1	hpr (keper)	dung-beetle
Ø F21	sdm (sejem)	ear of ox
₩ G4	tyw^2 (teeoo)	buzzard

¹Often written like G1 (§ 1.24), which represents the sound 3.

5. Phonograms Used as Phonetic Complements

- **1.31** Two main components of the hieroglyphic writing system have been introduced so far: ideograms and phonograms. A third component is not a new type of hieroglyph, but a specific use of phonograms, namely as phonetic complements.
- **1.32** A phonetic complement is a phonogram—mostly uniliteral, rarely biliteral—that specifies the sounds of another phonogram or of an ideogram. Phonetic complements seem to have at least two functions.

A first function is to resolve ambiguity. For example, the biliteral phonogram $\int_{0.025}^{0.025} can$ be read either as 3b or as mr. But by adding either $\int_{0.025}^{0.025} b$ or $\int_{0.025}^{0.025} m$ plus $\int_{0.025}^{0.025} r$, the ambiguous $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} (that is, <math>3b + b)$ or as mr in $\int_{0.025}^{0.025} can$ the ambiguous $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} (that is, <math>3b + b)$ or as mr in $\int_{0.025}^{0.025} can$ the ambiguous $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} (that is, <math>3b + b)$ or as mr in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ be read unambiguously either as 3b in $\int_{0.025}^{0.025} can$ is

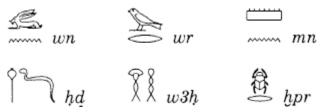
²Or maybe tw.

, $\stackrel{\frown}{\downarrow}$ and $\stackrel{\frown}{\downarrow}$ can easily be read as jn, n, sk, and tm, even if one does not remember the values of $\stackrel{\frown}{\smile}$ $\stackrel{\frown}{\downarrow}$ $\stackrel{\frown}{$

1.33 The position of phonetic complements varies. As a rule, phonetic complements referring to the first consonant of a phonogram precede the phonogram and phonetic complements referring to the last consonant follow the phonogram.

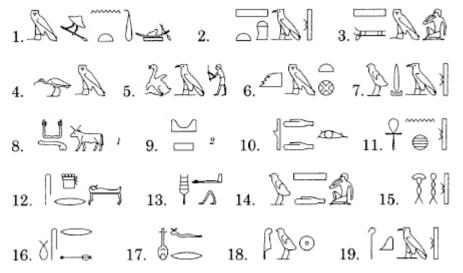
Exceptions occur for various reasons. For example, the spelling seems to be inspired by concerns for layout (see § 1.53 below), in that the spelling is avoided.

The number of consonants that are phonetically complemented also varies. Two common patterns are as follows. First, the last consonant of a biliteral phonogram or a triliteral phonogram is complemented.



Second, less frequently, both consonants of a biliteral phonogram or the last two consonants of a triliteral phonogram are complemented.

EXERCISES IN TRANSCRIBING BILITERAL AND TRILITERAL PHONOGRAMS



¹ The sign — is here probably a determinative (male).

^{2&}quot;The sign \square 039 (not to be confused with the alphabetic sign \square § § N37) is a determinative.

- 27. 28. []

LESSON 5 (§§ 1.34–48)

6. Determinatives

1.34 Determinatives appear at the ends of words, denoting the general concept class of the words. For example, a hieroglyph depicting a human being appears at the ends of words such as "woman," "priest," and "army," denoting the general concept class "human being." The three words all refer to human beings. Twenty-three common determinatives are listed in § 1.35. Words can have more than one determinative.

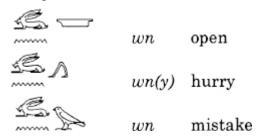
Ideograms and determinatives both refer to the concept of a word. But only ideograms also indirectly refer to their sound pattern (§ 1.13).

Determinatives have two useful properties. First, they appear at the ends of words and make it easier to separate words when reading. Hieroglyphic writing has no word division. Second,

determinatives resolve ambiguity between words written alike. Thus, the ideogram in

both s3 "scribe" and s3 "write." The determinative $\stackrel{\text{A1}}{=}$, depicting a seated man, is added to s3 "scribe." The determinative $\stackrel{\text{Y1}}{=}$, depicting a bookroll, is added to s3 "write."

Likewise, wn (wn + n), which contains two phonograms, is used to write the three words wn "open," wn(y) "hurry," and wn "mistake." Determinatives distinguish between the three. \longrightarrow ⁰³¹, a door, is added to wn "open." \bigwedge ^{D54}, walking legs, is added to wn(y) "hurry." \bigvee ^{G37}, a sparrow as determinative of things small and bad, I is added to wn "mistake."



1.35 COMMONLY USED DETERMINATIVES

determinative general concept or meaning denoted

A1 person; man

A2 activity of mouth or mind

A24 and D40 activity; force; effort

¹G37 (a sparrow) resembles G36 (a swallow). The hieroglyphs are colored differently. When color is absent, the shape of the tail differentiates the two.



also pp. 734—35). Consider the obelisk in the "obelisk" and the pyramid in preceding them are phonograms. If the obelisk and the pyramid are taken as determinatives, then the hieroglyphs preceding them are phonograms. If the obelisk and the pyramid are taken as ideograms, then the hieroglyphs preceding them are phonograms used as phonetic complements. A different perspective on this problem of classification is presented in § 1.55.

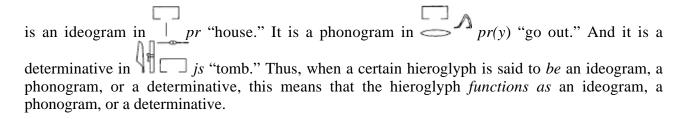
7. The Hieroglyphic Writing System: A Survey

1.37 Most hieroglyphs in any text can with little difficulty be classified with one of the four following groups:

(1) Ideograms: Refer to the concept of a word.
(2) Phonograms: Refer to the sound pattern of a word.
(3) Phonograms used as phonetic complements: Specify the sounds of ideograms or of other phonograms.
(4) Determinatives: Denote the general concept class of words.
Determinatives differ from both ideograms and phonograms. They refer neither to a word's concept nor to its sound pattern.
Note. — Ideograms are always also logograms (§§ 1.13-15). Phonograms are only sometimes also logograms. Only phonograms referring to a <i>complete</i> sound pattern are also logograms (§ 1.18).
This is because only <i>complete</i> sound patterns refer to concepts (§§ 1.6-9). Thus, a refers to the
complete sound pattern nfr in nfr "beautiful." This explains why the hieroglyph invokes the concept of beauty, even though it depicts the heart and windpipe of an animal (see also pp. xli-xlii).
Examples of the components of hieroglyphic writing follow.
$r^c \sin r$
is an <i>ideogram</i> referring to the concept "sun." The ideographic stroke is defined in the note to § 1.11 above.
$\iiint jm$ there
and \mathbb{A} are uniliteral <i>phonograms</i> referring to the sounds j and m .
nfr beautiful
and are uniliteral phonograms used as <i>phonetic complements</i> of the second and
third consonants of the triliteral phonogram \bigcirc <i>nfr</i> .
hrw day
\square , and \square are phonograms referring to h , r , and w . \odot is probably a <i>determinative</i> .
<i>Note.</i> — Two historical scenarios are thinkable as to how the writing hrw "day" came
about. The first is that \odot was in origin alone, and the phonograms \square h , \longrightarrow r , and w were added later. \odot is then in origin an <i>ideogram</i> . The second is that the phonograms \square h , w r , and w were first, and w was added to specify the general concept class. w is then in origin a <i>determinative</i> .
8. Types of Hieroglyphs Viewed as Functions
The same hieroglyphic character may be used in different ways. The hieroglyph , for example,

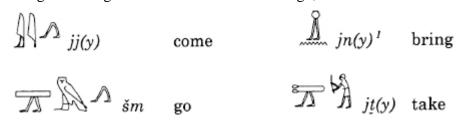
1.38

1.39



9. Monograms

or a determinative. For example, combining the phonograms , , , , , with the hieroglyph gives the following monograms: , , , and , and . These monograms occur in four related verbs of motion: "come," "go," "bring," and "take." "Come" is the opposite of "go" in the same way that "bring" is the opposite of "take." "Come" and "bring" express movement to the speaker; "go" and "take" do not. "Bring" is the causative of "come" just as "take" is the causative of "go." "Bring" means "cause to come along"; "take" means "cause to go along."



10. Writing without Vowels

1.41 Vowels are not represented in hieroglyphic writing. N nglsh, txts wtht vwls wd b dffclt t rd, bt mch cd stll b ndrstd. In many cases, however, ambiguity could not be resolved without the use of vowels, as in "The book is n the desk." Is the book *on* or *in* the desk? In Middle Egyptian, fortunately, prepositions are never distinguished from one another just by vowels.

¹ \bigcirc here refers to the sounds *jn*. For (y), see p. 350.

- **1.42** Middle Egyptian exhibits a hierarchy of consonants and vowels. This property of the *language* explains at least in part why the *script* dispenses with vowels. On the first level of the hierarchy, the consonants of a word tend to denote a basic meaning. On the second level of the hierarchy, the vowels mark sub-meanings. For example, the basic meaning of the consonants *s3* is something like "pertaining to the notion of writing." Vowels presumably differentiated between the two sub-meanings "write" and "scribe."
- **1.43** Vowels denoting sub-meanings are not written in the hieroglyphic script. Two factors partly make up for this lack of information. Perhaps the most important way of marking sub-meanings in writing is by means of determinatives. Word order also reveals sub-meanings of words.

Determinatives can distinguish in writing between two words that share the same consonants and

the same basic meaning (see § 1.34). For example, s3 "write" is written as $\frac{1}{2}$, with the

book-roll as determinative, and s3 "scribe" is written as determinative.

Word order, too, is important. For example, s3 "write" is a verb and s3 "scribe" is a substantive. Word order is very strict in Egyptian. Substantives do not appear in the same positions as verbs. It

can therefore usually be inferred from the position of s3 whether it means "write" or "scribe."

1.44 The hierarchy of consonants and vowels also occurs in English. But it is less typical. Thus, in "swim," "swam," "swum," the consonants *sw-m* express the basic meaning of swimming and the vowels *i*, *a*, and *u* express sub-meanings.

11. Orthography or Spelling

	a. Definition
1.45	Orthography is the art of spelling correctly. Ideally, there should be no other reason for spelling a word in a certain way than to render the sounds of that word as accurately as possible. But in Egyptian as in English, there are other reasons why words are spelled in certain ways. In English,
	for example, "recieve" is wrong. In Middle Egyptian, pr "house" is usually spelled , with an ideogram, not , with two phonograms, nor , with two phonograms and as a determinative. Some of the other reasons why words are spelled in a certain way can be identified if one knows the history of a word, especially its past pronunciations. But there is also a degree of randomness in spelling, especially in Egyptian. There is no specific reason, for example, why
	Middle Egyptian pr "house" should not have been spelled \bigcirc or \bigcirc . Dictionaries of Egyptian list variant spellings.
1.46	Hieroglyphic words contain from as few as one hieroglyph up to as many as six, rarely more.
1.47	Reading hieroglyphic words does not nearly require as much knowledge about the spellings of words as does writing hieroglyphic words. Reading hieroglyphic texts is easier than writing them.
	b. Variation in Spelling
1.48	Spelling variants are two or more spellings of a single word. For example, in English, the writings honor and honour illustrate the difference between American and British spelling. Night is standard, whereas nite is "progressive." These are spelling variants. In Egyptian, there is much more spelling variation than in English. For example, the word min "today" can be spelled as or, by adding a phonetic complement or a determinative, as or
	QUESTIONS
	1. What is a determinative? 2. Which are the four main components of the hieroglyphic writing system? 3. How is the statement" $\Box pr$ is a phonogram" less precise than could be? 4. Which two factors partly make up for the absence of vowels?

EXERCISE ON VARIATION IN SPELLING

What follows are four words in three spellings each. Find the matching spellings.

- 1. \(\frac{1}{2} \) \(\frac{1}{2} \) \(\frac{1}{3} \) \(\frac{1} \) \(\frac{1} \) \(\frac{1}{3} \) \(\frac{1}{3}
- 6. 7. 2 8. 5 9. 5 10. IN
- 11. PA 12. TOD

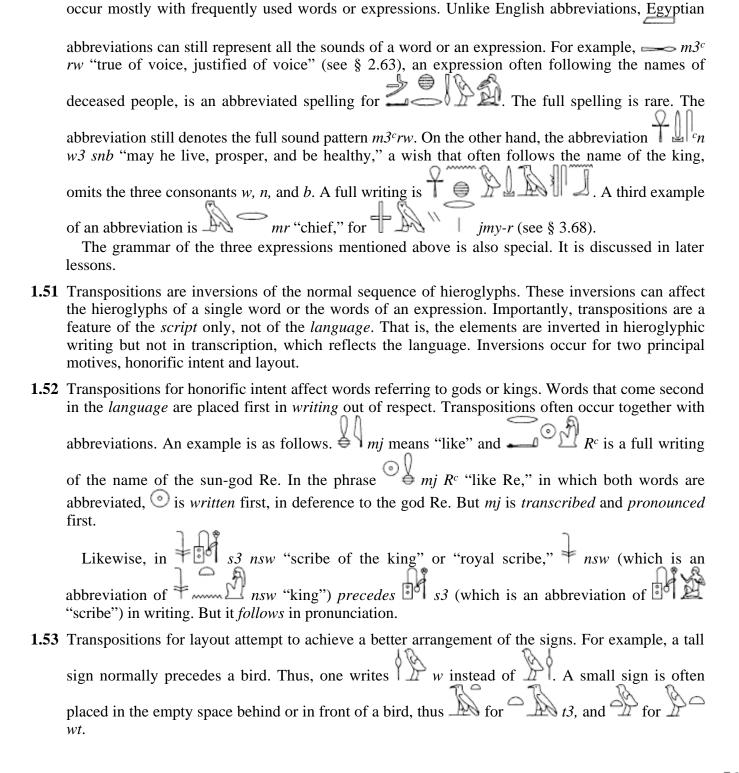
¹ The function of the sign \bigcirc W²⁴ is not clear.

LESSON 6 (§§ 1.49-55)

c. Unusual Spellings: Abbreviations and Transpositions

1.49	Unusual	spellings	are	spellings	that	disregard	rules	obser	ved in	the	spelling	of	most	words.
	Unusual	spellings f	ollov	w special	rules	that apply	to a l	imited	numbe	r of	spellings	onl	y. Tw	o types
	of unusua	al spellings	s are	discussed	here	: abbreviat	ions a	nd tran	spositi	ons.				

1.50 Abbreviations are shorter writings of hieroglyphic words and phrases. As in English, abbreviations



12. Hieroglyphic Layout

1.54 Hieroglyphic layout is the spatial arrangement of hieroglyphs and hieroglyphic texts. The

following rules apply.

	77							
	First, individual hieroglyphs are often grouped into imaginary rectangular boxes, hence $jb.f$							
	"his heart," and not ∇							
	Second, hieroglyphic writing as a rule runs from right to left. Texts written from left to right do							
	occur. In this grammar, hieroglyphic words run from left to right, in harmony with the English text.							
	Third, human beings and animals depicted by hieroglyphs look toward the beginning of the text, to the left in writing that runs from left to right and to the right in writing that runs from right to							
	to the left in writing that runs from left to right and to the right in writing that runs from right to							
	left. For example, $j^c nw tpyw t3$ "0 living ones on earth" needs to be read from							
	right to left because \mathcal{L} , \mathcal{A} , and \mathcal{D} look rightward.							
	Fourth, top signs are read before bottom signs and right signs before left signs. Because writing							
	runs from left to right in this grammar, left signs are read before right signs. For example, in the \Box							
	word pt "heaven," which contains p and t as uniliteral phonograms and t as a							
	determinative, the order of reading is $\square - \square - \square$. The order $\square - \square - \square$ is not a							
	possibility. Because the right half of extends below , reading before would violate							
	the rule that top is read before bottom. Fifth, hieroglyphic texts can be written in lines or columns. What follows is a single phrase, <i>jrr</i>							
	sst.f nbt "who does everything that he (the king) praises," written in a line and in a column and both							
	from left to right and from right to left.							
	\/ 8 \ \							
	13. Concluding Remark							
1.55	Historical interpretations of the script may differ from synchronic interpretations. After all, one							
	writes and reads a script without knowing anything about its origin and history. One can therefore							
	interpret the script independently from its history. This is called a synchronic interpretation. What							
	follows illustrates how a historical interpretation can differ from a synchronic interpretation.							
	Consider the hieroglyphs \triangle in \bigcap mr "pyramid" and \bigcap in \bigcap $s3$ "scribe."							
	Λ							
	Historically speaking, $\bigoplus_{\mathbb{C}}$ was probably first, denoting mr "pyramid" all by itself as an <i>ideogram</i> .							
	The phonograms mr , m , and r were presumably added later for further specification. Historically speaking, mr was probably second. alone in origin probably denoted mr "scribe."							
	Historically speaking, was probably second. alone in origin probably denoted s3 "scribe."							

was then added later as a *determinative*. These historical interpretations differ. But synchronically speaking, \triangle and \triangleright both appear at the end of a word and seem otherwise similar. Are they ideograms, determinatives, or something in between?

QUESTIONS

1. How can one easily recognize the direction of writing? 2. Which rules determine in which order the signs in pt "heaven" need to be read (assuming writing from left to right)? 3. How are the last signs in pt and pt similar synchronically but presumably different historically?

EXERCISE ON TRANSPOSITIONS AND ABBREVIATIONS

Match these items with the transcriptions that follow.

a. snr (senecher) "incense," spelled as if nrsnr; honorific transposition (nr means "god"). **b.** pr-nsw (per-nesoo) "palace (house of the king)"; honorific transposition. **c.** d-mdw S43 (jed-medoo), spelled as if mdw (translated traditionally as "words spoken"); abbreviation. **d.** maybe tp^{R4} -d(y)-nsw (hetep-dee-nesoo), spelled as if sw ttp d(y) (often rendered as "a boon [tp] that the king [nsw] gives [d(y)]"); abbreviation. **e.** m3j (mah-ee) "wretched person," spelled as if m3jr (mah eer); hybrid writing revealing shift from m3r (mahr) to m3j (mah-ee). **f.** nr R8 nfr (necher nefer) "the good god" (royal epithet). **g.** s3 nsw (sah nesoo) prince (son of king). **h.** pr(t)-rw (per(et)-keroo) (often rendered as "invocation-offerings"; literally perhaps: "coming forth [pr(t)] of the voice [rw]"); O x^{3} (loaf of bread) and O w^{3} (beer-jug) are determinatives.

Exercise in Locating Signs in the Sign-list on pp. 733- 74 by Letter and Number

1.
$$\bigcirc$$
 2. \bigcirc 3. \longrightarrow 4. \bigcirc 5. \bigcirc 6. \bigcirc 7. \bigcirc 88. \bigcirc 8. \bigcirc 9. \bigcirc 10. \bigcirc 11. \bigcirc 12. \bigcirc 13. \bigcirc 14. \bigcirc 15. \bigcirc 16. \bigcirc 17. \bigcirc 18. \bigcirc 19. \bigcirc 20. \bigcirc 21. \bigcirc 22. \bigcirc 23. \bigcirc 24. \bigcirc 25. \bigcirc 26. \bigcirc 27. \bigcirc 28. \bigcirc 29. \bigcirc 30. \bigcirc

BEFORE BEGINNING THE STUDY OF THE LANGUAGE

Learning Middle Egyptian is unlike learning most other languages. The main reason is that, for all its beauty and complexity, hieroglyphic writing does not fully represent the Egyptian language, especially not Old and Middle Egyptian. Because vowels are omitted, many distinctions we know existed cannot be verified in every instance. Other distinctions we strongly suspect existed have not been validated in a single instance. Consequently, the presence of features that are not visible often needs to be inferred by reasoning from the context. Not seeing the whole language poses a major challenge for readers of Middle Egyptian. Operating with distinctions one knows existed or has good reason to believe existed without being able always to observe them is probably the main difference between learning Old and Middle Egyptian and learning most other languages. Knowing the language, ancient readers had a certain advantage in overcoming the ambiguities resulting from the nature of the script.

Our knowledge of Middle Egyptian is still being refined. But because of the deficient script, it will always be incomplete. There can be no doubt, however, from what we do know that Egyptian was as complex as any known language.

LESSON 7 (§§ 2.1–14)

CHAPTER TWO SUBSTANTIVES AND ADJECTIVES

1. Word, Sentence, Clause, Phrase

- **2.1** The present analysis of Middle Egyptian relies entirely on four types of elements: the word, the sentence, the phrase, and the clause.
- 2.2 The word is the basic unit. The other three elements are defined in terms of the word. The sentence, the phrase, and the clause are strings of words. Five types of sentences will be distinguished according to the pattern they exhibit: substantival sentences, adjectival sentences, adverbial sentences, existential sentences, and verbal sentences. Three types of clauses and phrases will be distinguished according to the function they have in the sentence of which they are part. Clauses and phrases can be substantival, adjectival, or adverbial, that is, they can function as substantives, adjectives, or adverbs.
- **2.3** There is no universally accepted definition of the word. A practical approach is taken here. It is assumed that we know roughly what a word is. Likewise, biologists study life without being able to define it.
- **2.4** Hieroglyphic writing does not exhibit word division. Two features that facilitate word division are determinatives, which mark the ends of words, and the knowledge that most words consist of two or three consonants (§ 2.7).
- **2.5** In modern transcriptions of hieroglyphic writing, words are separated by spaces.

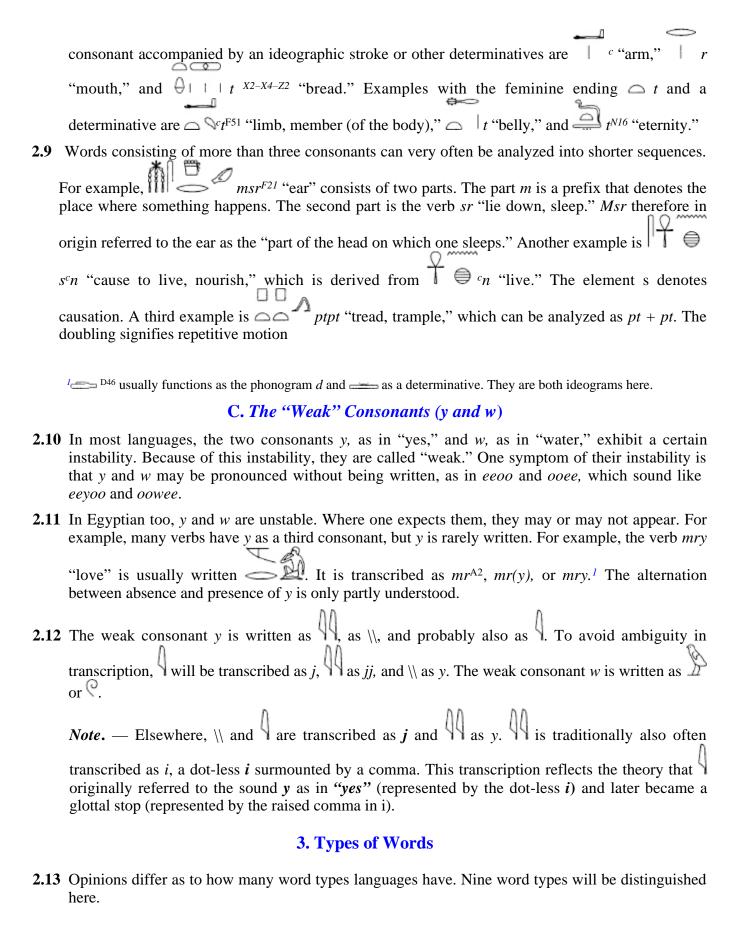
2. The Structure of Words

a. Vowels

2.6 Vowels are not expressed in hieroglyphic writing. They can be reconstructed with some degree of plausibility. Vocalizing words, that is, adding the vowels, presupposes an advanced knowledge of the language and will hardly be practiced in this grammar.

b. Number of Consonants

- 2.7 Most Egyptian words consist of two or three consonants. Examples are m "name" and nr^{R8} "god." The feminine ending t (§2.17) will not be counted as a consonant of the word, but as an ending. Examples of feminine words with two or three consonants are $rac{rt}{rt}$ "hand" and $rac{rt}{rt}$ "hand" and $rac{rt}{rt}$ "book." Words of one or four consonants are not uncommon. Words of more than four consonants are rare.
- **2.8** Many of the most frequently used words consist of one consonant only. Examples without determinatives are m "in, from," n "to, for," and r "towards, against." Words of one



¹ Since knowing that a verb has a weak consonant is important, even if this consonant is only rarely written out, dictionaries mention this fact.

substantive (noun)
pronoun
particle
adjective
verb
interjection
adverb
preposition
numeral

2.14 Each word type has its own general meaning. For example, substantives denote what may be called entities, such as "falcon," "bark," "residence." This includes abstract entities such as "love" and "fear" and proper names such as "Re," "Thoth," and "Nubia." Adjectives denote properties, such as "great," "plentiful," "true." Adverbs denote circumstances: "here," "yesterday," "thus." Verbs refer to change: "become," "go," "make."

QUESTIONS

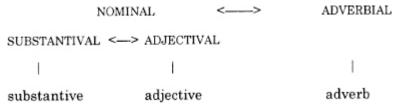
1. How many consonants do most words have? 2. How can the words msr and $s^c n$ be analyzed? 3. Which are the two "weak" consonants and why are they called so? 4. What are some examples of the general meanings of word types?

LESSON 8 (§§ 2.15-29)

4. Substantives

a. Substantive or Noun

2.15 Substantives or nouns are words referring to entities. For reasons of system, the term "substantive" will be used henceforth, at least in writing. The commonly used "noun" is avoided. The main reason is that the adjectival term corresponding to "noun," namely "nominal," becomes available to encompass "substantival" and "adjectival." Substantives and what is substantival and adjectives and what is adjectival have features in common that distinguish them jointly from adverbs and what is adverbial. It is therefore convenient to have a term that refers to "substantival" and "adjectival" together as opposed to "adverbial," according to the following scheme.



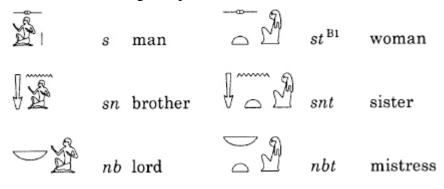
b. Gender and Number

2.16 Middle Egyptian substantives have two genders, masculine and feminine, and three numbers, singular, dual, and plural. Singular substantives refer to one entity, plural substantives to more than two. Dual substantives refer to two entities that often form a pair. Gender is fixed whereas number is changeable. That is, a single substantive must be *either* masculine *or* feminine, but it has singular, dual, and plural forms.

Note. — There are no definite or indefinite articles. Depending on the context, the substantive S "man" may mean "the man," "a man," or "(any) man."

c. Singular Forms

2.17 Singular masculine substantives have no ending. Feminine singular substantives mostly end in $\triangle t$. The feminine ending $\triangle t$ precedes determinatives.

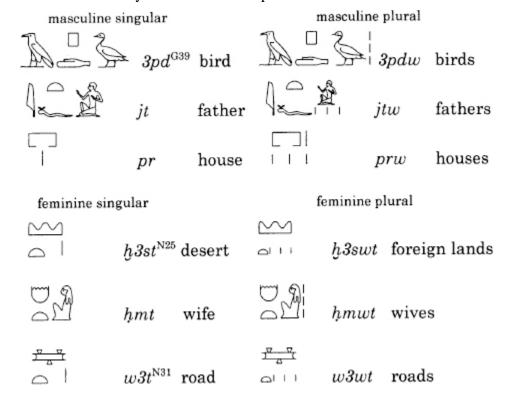


Some substantives, including most place-names, do not end in $\triangle t$ yet are feminine. An example is $K3\S^{N25}$ "Kush (Nubia)."

The feminine ending ct is disregarded in alphabetizing words in dictionaries. For example, ct^{F51} "limb" is classified as ct and therefore precedes ct^{F51} "great."

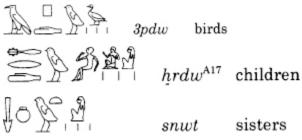
d. Plural Forms

- **2.18** Masculine plural substantives end in w. Feminine plural substantives end in wt. Note that w precedes t in the feminine plural ending wt.



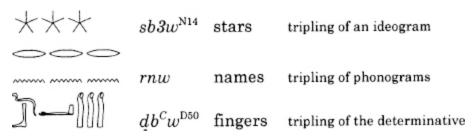
Exceptionally, is not read. Its function is not quite clear.

2.20 Less often, the consonant w of the plural endings w and wt is expressed by the phonogram or \mathbb{C} . This phonogram precedes determinatives. This is extremely rare in the feminine plural.

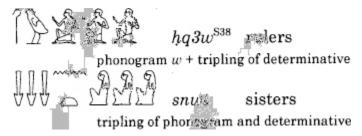


2.21 The third way of writing the plural, common in Old Egyptian but rare in Middle Egyptian, consists of tripling ideograms, phonograms, or determinatives.

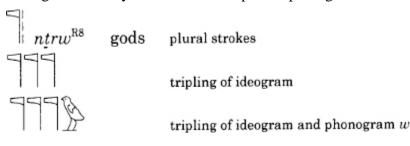
²But \triangle | t "wood" is written as if it were a feminine word.



2.22 Different ways of writing the plural can be combined. But the "plural strokes" and tripling are incompatible. Examples in addition to *3pdw* "birds," *rdw* "children," and *snwt* "sisters" already cited above are as follows.



2.23 A single word may exhibit different plural spellings.

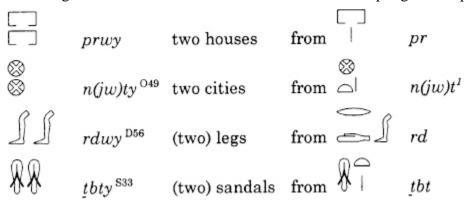


e. Dual Forms

- **2.24** The ending of the masculine dual is *wy* (modern pronunciation, *oowee*). The ending of the feminine dual is *ty* (*tee*).
- **2.25** The dual endings wy and ty are rarely written with phonograms. Examples are as follows.



Instead, dual endings are mostly written by doubling ideograms, determinatives, or phonograms. Doubling is much more common with dual forms than tripling is with plural forms.



[&]quot;Two" can obviously be omitted in translation whenever two entities form a pair, such as "legs" or

"sandals."

Note. — \setminus was originally a determinative expressing duality, just as the plural strokes denote plurality; the strokes could also be vertical. Because dual forms end in wy or ty, \setminus became associated secondarily with the consonant y and thus came to function as the phonogram y, also outside the dual.

f. Survey of Gender and Number Endings

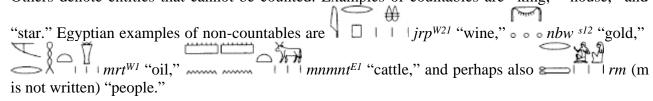
2.26

	singular	plural	dual
masculine	no ending	-w	-wy
feminine	-t	-wt	-ty

¹ A rare explicit spelling is \triangle nt. The element jw is traditionally inferred.

g. Countables and Non-countables

2.27 Every substantive can be assigned to one of two groups. Some denote entities that can be counted. Others denote entities that cannot be counted. Examples of countables are "king," "house," and



2.28 The contrast between singular and plural does not apply to non-countables. Substantives are only singular or plural if they potentially have two forms to express the contrast between singular and plural. Non-countables only have one form. This single form has something of both a singular and a plural. Adjectives accompanying this form appear in the singular. But the entities denote a plurality: "oil" includes many liters of oil; "gold" encompasses many pieces and objects of gold, and so forth. Non-countables are therefore often written with the "plural strokes" as determinative. This is a case in which the "plural strokes" do *not* denote a plural form.

h. False Plurals

2.29 "False plurals" are singular substantives written as though they were plurals because, like plurals, they end in w. Two examples are 000 nfrw "beauty" and 000 mnw "monument."

QUESTIONS

1. What is the definition of the substantive? 2. What are the two properties of the substantive? 3. In which three ways is the plural written? 4. What is a non-countable substantive? 5. What is a false plural?

CORE VOCABULARY

The core vocabulary (see also pp. 82-87, 103, and 152-53) contains common words. The exercises in translation from English to Egyptian partly draw on it. One spelling and one possible translation is mostly provided per word. The letter and number of the hieroglyphs in the Gardiner sign-list can

be retrieved, by way of exercise, from the short version of that list on pp. 736-68 (with an index on pp. 769-74). One also finds there the information necessary to understand the function of all the hieroglyphs used in the words of the core vocabulary.

SUBSTANTIVES

DIVINE AND HUMAN

1.
$$ntr \mod 2$$
. $ntrt \mod 8$
3. $s \mod 4$. $st \mod 8$
5. $st \mod 6$. $st \mod 6$. $st \mod 6$

FAMILY

23.	m(w)t	mother	24.		jt	father
25.	snt	sister	26.	12	sn	brother
27.	s3t	daughter	28.	なん	s3	son

AGE

SOCIETY

31. I nsw king

32. ** šmsw follower

33. sr official 34. j3t office

 $_{37.}$ \smile $\stackrel{\circ}{\mathcal{D}}$ $_{nb}$ lord $_{38.}$ $\stackrel{\circ}{\mathcal{D}}$ $\stackrel{\circ}{\mathcal{D}}$ $_{b3k}$ servant

SCHOOL

39. sh3 scribe 40. md3t book

COSMOS

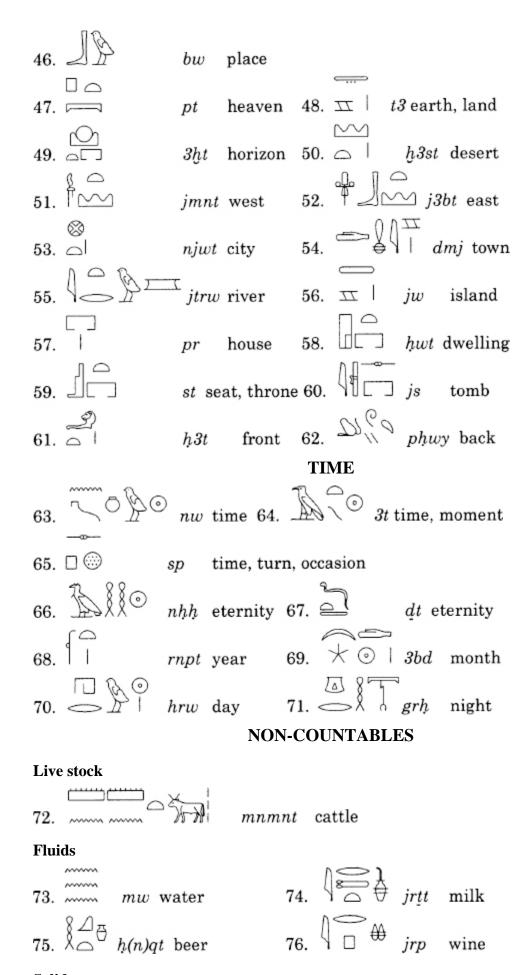
41. r^c sun 42. sb3 star

ANIMAL

43. 1 jht cow 44. 1 k3 bull

45. 3pd bird

PLACE



Solids

Other

TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

Answers consists of two items, (a) the hieroglyphic version and (b) the modern transcription, as follows.

The vocabulary can be found in the examples cited so far in Chapter Two or in the core vocabulary on pp. 82-87. More than one answer may be possible.

1. (a / the) sister 2. (the) sisters 3. (the) two sisters 4. (a / the) brother 5. (the) brothers 6. (the) two brothers 7. (the two) arms 8. the eyes (of a person) 9. cattle 10. gold 11. beauty 12. the (foreign) lands 13. a book 14. faces 15. the names

LESSON 9 (§§ 2.30-37)

5. Substantival Phrases

a. Phrase

2.30 The definitions of sentence, clause, and phrase are interrelated. Sentences are strings of words expressing complete thoughts. In English, they typically begin with a capital and end with a period. Clauses and phrases are strings of words that are part of a sentence. As opposed to phrases, clauses contain all the elements needed to express a complete thought. An example of a clause is "when the monument had been finished." The elements "the monument had been finished," all found in this clause, can form a sentence or complete thought. But no sentence can be derived from the phrases "temple of Re" or "on your chariot" without adding words. Clauses can therefore be associated with sentences. Phrases cannot. The clause "when the monument had been finished" is associated with the sentence "the monument had been finished."

Note. — Clauses sometimes consist of a single word. But phrases by definition contain more than one. After all, single words with substantival, adjectival, or adverbial function are called substantives, adjectives, or adverbs.

b. Substantival Phrase

2.31 Substantival phrases consist of a substantive and any words subordinated to it. One element is subordinated to another if it requires the presence of that other element. For example, in "I saw the nomads of Asia," "of Asia" is subordinated to "the nomads" because one can say "I saw the nomads," but not "I saw of Asia." "Of Asia" presupposes "the nomads." English examples of substantival phrases are "nomads of Asia," "Nubian bowmen," "the whole crew" "another day," and "an offering which the king gives." The governing substantive has been marked in italics.

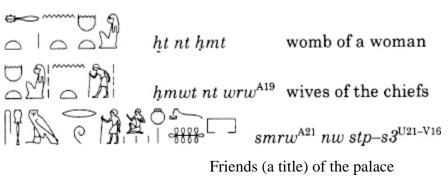
In Egyptian substantival phrases, the subordinated words mostly follow the substantive to which they are subordinated. The subordinated word may be a substantive or an adjective. It is a substantive in the genitival phrase and the appositional phrase discussed next.

c. Genitival Phrase ("Of")

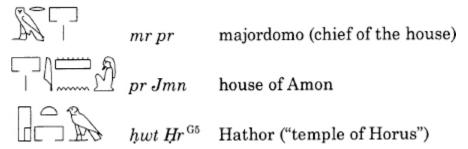
- **2.32** Genitival phrases express relations between two entities in which the first entity originates from or belongs to the second. They correspond to English "of" and "'s," as in "roads of Egypt," "lock of hair," and "a stranger's voice." There are two types of genitival phrases: the direct genitive and the indirect genitive.
- **2.33** In the indirect genitive, two entities are connected by ______, transcribed n(y) or n. ______ n(y) corresponds, for all practical purposes, to English "of." The connector ______ n(y) is apparently an adjective derived from the preposition ______ n "to, for." Like any adjective, ______ n(y) agrees in gender and number with a preceding substantive. But with the progress of time, ______ n remained more and more often invariable, whatever the gender or number of the preceding substantive. The forms of the adjective ______ n(y) are as follows (dual forms are rare).

	singular	plural	dual
masculine	n	$\mathop{\bigcirc}\limits_{\mid \ nw}$	\(\frac{\begin{array}{cccccccccccccccccccccccccccccccccccc
		*****	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
feminine	\bigcirc nt	\bigcirc nt	\triangle \\\ nty

Examples are as follows.

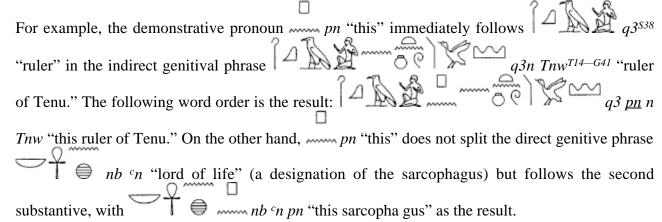


2.34 In the direct genitive, two entities are juxtaposed without n(y) intervening. As distinct from the indirect genitive, the direct genitive is used when the bond between the two entities is strong, as if the two concepts were just a single one. Examples follow.



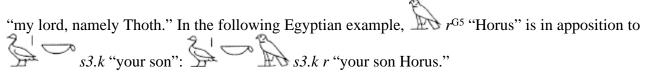
Note.—The two segments of the direct genitive phrase were presumably pronounced with a single main stress. This may have been accompanied by a change of the vowels in the first substantive.

2.35 The bond between the two segments of a direct genitive is unbreakable. In principle, nothing can come between them. On the other hand, in the indirect genitive with n(y), words do intervene.



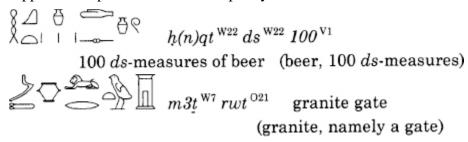
d. Appositional Phrase

2.36 Appositional phrases are substantival phrases in which one entity follows another to define it more closely. Apposition can be paraphrased by English "namely." An English example is "Thoth, the son of Re": "the son of Re" is in apposition to "Thoth." Another example is "my lord Thoth," as if:



Note. — In appositional phrases as well as in direct genitives, two substantives or substantival phrases immediately follow one another in the same phrase. But presumably, in appositional phrases, both substantives retained their own stress (cf. the note to § 2.34).

2.37 Appositional phrases are used to specify measure or material.



QUESTIONS

1. How do phrases differ from clauses? 2. What are the two types of genitival phrases? 3. What is an appositional phrase? 4. How did the direct genitive presumably differ from the appositional phrase in speech?

IDENTIFICATION OF WORDS, SENTENCES, CLAUSES, AND PHRASES

Identify the 20 underlined portions as words, sentences, clauses, or phrases. Double lines mark the overlap of two portions.

At night I strung my bow, sorted my arrows, practiced with my dagger, polished my weapons. When it dawned Retenu came. It had assembled its tribes; it had gathered its neighboring peoples; it was intent on this combat. He came toward me while I waited, having placed myself near him. Every heart burned for me; the women jabbered. All hearts ached for me thinking: "Is there another champion who could fight him?" He raised his battle-axe and shield, while his armful of missiles fell toward me. When I had made his weapons attack me, I let his arrows pass me by without effect, one following the other. Then, when he charged me, I shot him, my arrow sticking in his neck. He screamed; he fell on his nose; I slew him with his axe. I raised my war cry over his back, while every Asiatic shouted. I gave praise to Mont, while his people mourned him. The ruler Ammunenshi took me in his arms.

TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

Provide both the hieroglyphic version and the modern transcription.

1. name of the god 2. the scribe's book 3. wives of the officials 4. stars of the sky 5. queen (king's wife) 6. prince (king's son) 7. eternal city (city of eternity) 8. son of the official, Ppj^2 9. the language (mouth) of a man 10. lord of the house 11. eyes of the goddess 12. the woman $Mmjjt^2$

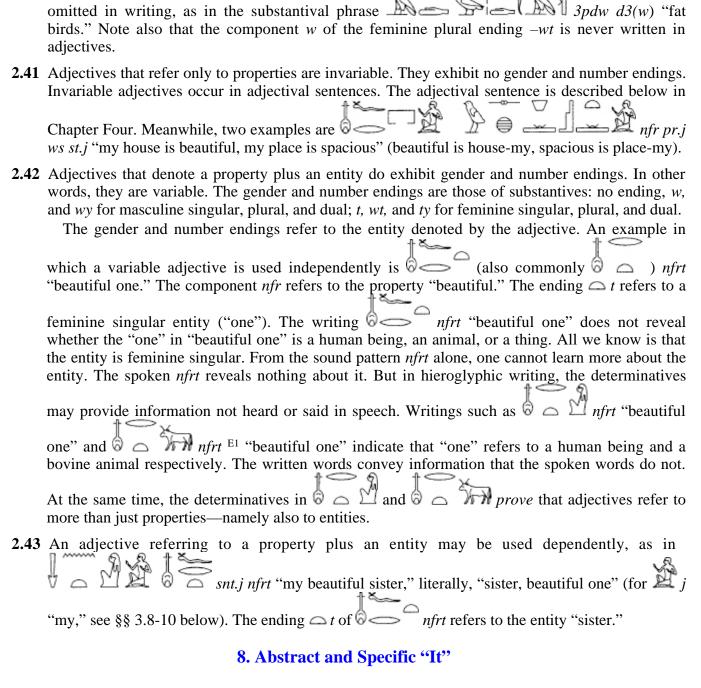
¹ From Miriam Lichtheim's translation of the Story of Sinuhe.

² Write this name with uniliteral phonograms (see pp. 18-20).

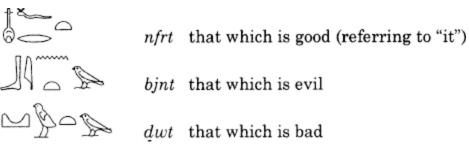
LESSON 10 (§§ 2.38–45)

6. Excursus: On Fact and Inference

2.38	The constant need to distinguish between facts and inferences makes learning Old and Middle Egyptian different from learning most other languages. Before proceeding with the study of the language, it seems appropriate to discuss this distinction. Because hieroglyphic writing transmits an incomplete picture of Middle Egyptian, fewer facts are accessible to observation and fewer facts are known. This makes Middle Egyptian seem deceptively easy at the outset. There is not as much to be learned as with most other languages. But behind the incomplete picture transmitted by hieroglyphic writing lurks a complete system. If something cannot be seen, it seems one should not be able to say anything about it. There are ways of making statements about that which is not observable, however. If such statements cannot be made on the basis of observable facts, they must be made on the basis of inference. Inferences are reasoned derivations from facts. Consider the text be made on the basis of inference. Inferences are reasoned derivations from facts. Consider the text pr Jmm, a sequence of two words is a phrase, it can be translated in at least two ways, namely as "the house, (namely) Amon" and "the house of Amon." According to the first translation, it is an appositional phrase. According to the second translation, it is a direct genitive. The interpretation as a direct genitive phrase, "house of Amon," seems to make much more sense and is therefore preferable. It may be inferred with some degree of plausibility that pr Jmn is a direct genitive. But this interpretation is not supported by observable facts and cannot be positively proven. In other words, that pr Jmn means "house of Amon" is an inference, not a fact. On the other hand, the translations of pr as "house" and of Jmn as "Amon" are facts, and the order in which they come are also facts. But that pr and Jmn together form a direct genitive is not. The context is often helpful in making reasonable inferences, but it is also quite often not decisive. It is therefore pre
	must have been clear that \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \
	7. Adjectives
2.39	Adjectives are words denoting either a property or a property plus an entity. A list of common adjectives is found in the core vocabulary provided at the end of this lesson (p. 103). An example is the adjective <i>nfr</i> "good, beautiful." When it denotes just a property, <i>nfr</i> means
	"good." But when it denotes a property plus an entity, it means "good one."
	When denoting a property plus an entity, the adjective $\frac{1}{2}$ on $\frac{1}{2}$ on $\frac{1}{2}$ or
2.40	independently and dependently. When it is used independently, it means "the good one" or "a good one" or the like. When it is used dependently, it is typically attached to a substantive with which it
	forms a substantival phrase, as in $pr nfr$ "(the) good house." Other examples of such substantival phrases are $nr c3$ "great god" (that is, "god, great one") and st^{Q1}
	substantival phrases are nr^{c} "great god" (that is, "god, great one") and r^{c} st ^{Q1} wrt "throne" (that is, "seat, great one"). In substantival phrases, the endings of adjectives are often



- 2.44 In English, specific "it" refers to specific entities that are things or animals, such as "wall," "table," "love," "bear," and so on, as in "he looked at it" (that is, the wall). Abstract "it" does not refer to any entity in specific, as in "he said it because ..." Egyptian does not have an equivalent of specific "it." As will be seen later, masculine entities are referred to by masculine pronouns, feminine entities by feminine pronouns. For example, | pr "house" is masculine and is referred to by the same pronoun as a male human being. In English, however, "house" is referred to by specific "it" and "man" by "he."
- **2.45** Whereas specific "it" is either masculine or feminine in Egyptian (depending on the substantive it refers to), abstract (or general, or generic) "it" is expressed by the feminine gender. Accordingly, adjectives referring to abstract "it" assume the ending *t*. Examples are as follows.



These adjectives refer to a property plus an entity. The properties are "good" and "bad" (bjn and w are synonyms). The entity, referred to thrice by $\triangle t$, is generic "it" in all three instances, bjnt could of course also be translated as "good one" and "bad one," with $\triangle t$ referring to an afore-mentioned feminine singular entity.

Finally, abstract "it" can also be expressed by prefixing bw bw to certain adjectives. Examples are bw bw bjn "(that which is) evil."

CORE VOCABULARY

ADJECTIVES

84. In fr good, beautiful 85. In fr bin bad, evil 86. In fr good, beautiful 87. Wr great 88. In fr and fr small 89. In fr and fr wide 91. In fr and fr are 92. In fr weak 93. In fr and fr are 95. In fr and fr sweet 96. In fr and fr sweet 96. In fr and fr are 95. In fr and fr sweet 96. In fr and fr are 95. In fr and fr sweet 96. In fr and fr are 95.

QUESTIONS

1. Which role do inferences play in the study of Middle Egyptian? 2. What do adjectives denote? 3. When are adjectives variable? 4. In which two ways are variable adjectives used? 5. What are the six gender and number endings of adjectives? 6. In what way do and and provide more information in writing than in speech? 7. How is abstract "it" expressed? 8. When does have the same meaning as 10. What does seem to lack?

TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. beautiful house of Amon 2. beautiful one (said of a man) 3. beautiful one (said of a woman) 4. that which is beautiful 5. great ones (said of cities) 6. beautiful man 7. beautiful woman 8. great cities 9. great lord of the house 10. lord of the great house 11. (that which is) evil 12. the great god Horus 13. fat bulls 14. much¹ wine 15. many houses

¹ In English, "much" is for non-countables, "many" for countables.

LESSON 11 (§§ 2.46-69)

9. Relational Adjectives (or "Nisba" Adjectives)

a. Form or Sound Pattern

2.46 Relational adjectives are adjectives derived from two other word types, substantives or prepositions, by means of the ending *y*. Only relational adjectives derived from substantives are discussed in this Chapter Two. Relational adjectives derived from prepositions will be discussed after prepositions have been introduced in Chapter Three.

b. Meaning or Concept

- **2.47** Like all adjectives, relational adjectives denote properties. The property denoted by relational adjectives is that which is related or pertains to the substantive or the preposition from which the relational adjective is derived. For example, the relational adjective derived from the substantive "god" means "pertaining to god," that is, "godly" or "divine."
- **2.48** Another name for relational adjectives is "nisba-adjectives." *Nisba* is Arabic for "relation." Arabic as well as Hebrew have relational adjectives ending in *y* like Egyptian. Examples are "Israeli" and "Iraqi." In English, relational adjectives can end in *ly*. An example is "heavenly," that is, "relating to heaven," derived from the substantive "heaven."

c. Examples

2.49 The ending y makes the substantive $rac{mt}^{P5}$ "north wind" into the relational adjective mty (pronounced mehtee) "relating to the north wind," that is "northern (one)." Another example is $rac{mt}{mt}$ "divine," derived from $rac{mt}{mt}$ "god."

d. Gender and Number Endings

2.50 Like all adjectives, relational adjectives take gender and number endings: y is the masculine singular, yw is the masculine plural, yt is the feminine singular, and ywt is the feminine plural. The ending y is written as $\setminus \setminus$. It often remains unwritten, always so in the feminine singular and plural.

The masculine plural of relational adjectives derived from feminine substantives, tyw for t + y + w, is often written as G^4 .

- - e. Masculine Singular Relational Adjective and Dual Form of a Feminine Substantive
- 2.52 The masculine singular relational adjective and the dual form of a feminine substantive both end in

ty. A form such as njwty, derived from $n(jw)t^{0.49}$ "city," therefore has two meanings. As the feminine dual form, it means "two cities." As a relational adjective, it means "(one) relating to the city." In fact, the dual writing njwty, which ought to mean "two cities," is used in a playful manner to write njwty "pertaining to the city," as in nr njwty "city god" or "local god" (that is, "god, pertaining to the city").

f. The Double Feminine Ending of Relational Adjectives Derived from Feminine Substantives

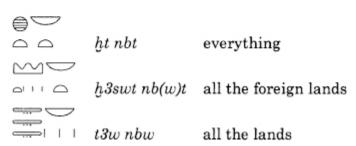
2.53 Feminine relational adjectives derived from feminine substantives have two feminine endings $\triangle t$.

An example is $\triangle \square^{\square} mt(y)t$ "northern (one)" (said of a feminine singular entity). The first $\triangle t$ of mt "north," from which the relational adjective $\triangle \square^{\square} mt(y)t$ is derived. This t is invariable. The second $\triangle t$ is the feminine ending of the relational adjective itself. This t is variable. It alternates with the absence of t in the masculine singular form $\triangle \square^{\square} mty$.

10. "Every," "All"

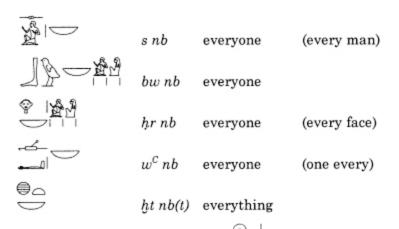
2.54 "Every" is expressed by *nb*. Like adjectives, *nb* follows substantives and takes gender and number endings. The gender and number endings are often written as given in the table below. Three examples follow.

-	singular	plural
masculine	\smile nb	\bigcup $\mid \cdot \mid \cdot \mid nbw$
feminine	$ ag{nbt}$	\triangle $nb(w)t$



2.55 As is the case with adjectives, the gender and number endings of nb are often not written. Were they also not pronounced? Examples are t nb(t?) "everything" and t + t = 3swt nb(wt?) "all foreign lands."

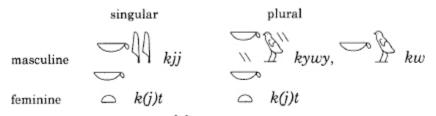
2.56 Unlike adjectives, — *nb* cannot be used independently as an equivalent of "everyone" or "everything." Instead, the following idioms are used.



- 2.57 The Egyptian for "every day" is r^c nb "every day" (literally, "every sun"). The normal word for "day" is jr / hrw. The expression hrw nb also exists. But it is as a rule further defined, as in "every day on which ..." It also means "any day," distributively.
- 2.58 When nb "every" and an adjective both follow a substantive, nb comes first, as in nb "every good thing."

11. "Other"

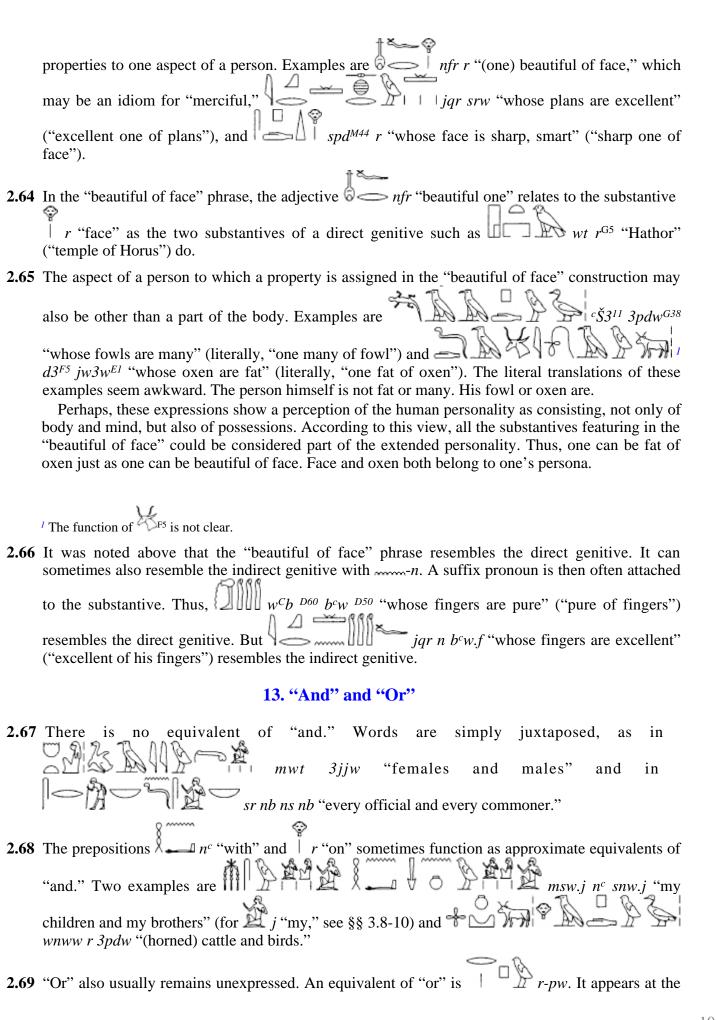
2.60 The equivalent of "other" is kjj. Like adjectives, it is declined according to gender and number.



- 2.61 Unlike adjectives, kjj precedes the substantive to which it is subordinated as part of a substantival phrase. Examples are the two substantival phrases a = b + kt prti^{F46-N33} "another remedy" and adjective derived from bjt "bee." It means "he of the bee" or the like.
- 2.62 *kjj* can be used independently ("another one," "the other one"). *kjj kjj* means "one another."

12. Adjectival Phrases: The "Beautiful of Face" Phrase

2.63 Adjectival phrases are strings of words consisting of an adjective and the words that are subordinated to it. One type of adjectival phrase is the "beautiful of face" phrase. It attributes



end of options connected by "or," as in str-pw "man or woman."

QUESTIONS

1. What is a relational adjective? 2. What are the two possible translations of njwty? 3. What is the function of each of the three consonants of the ending tyw^{G4} in tyw^{G4}

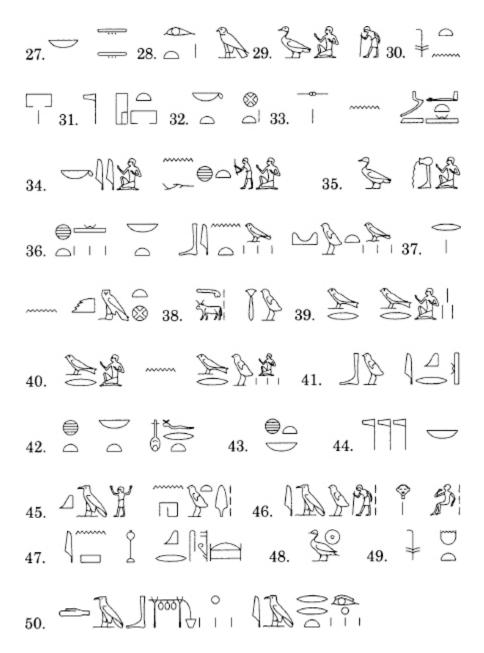
TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. many of bulls, who has many bulls (said of a woman) 2. many bulls 3. all the bulls 4. all the good bulls 5. the bulls and the officials 6. the bulls of the officials 7. beautiful of face, who has a beautiful face (said of a man) 8. beautiful face 9. fat oxen 10. fat of oxen, who have fat oxen (said of women) 11. all the lands 12. everyone's land 13. another eye 14. someone else's eye 15. city god 16. divine city

TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

This exercise pertains to Lessons 7 to 11. The vocabulary follows the exercise. Be sure to identify word and phrase types. Also distinguish fact from inference. It is often useful to provide a literal translation before a free and idiomatic one. Words have been separated to facilitate reading, except in 43 and 48. In 22, the suffix pronoun f ("his"), introduced in Chapter Three (see § 3.8), is not separated from the substantive that it accompanies.





VOCABULARY FOR THE PREVIOUS EXERCISE

Words are listed in "alphabetical" order. This order is as follows:

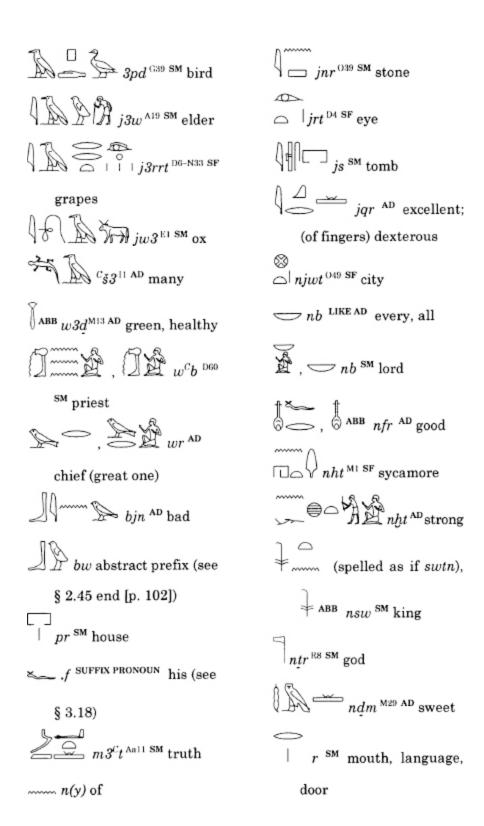
The feminine singular ending t is disregarded in classifying "alphabetically."

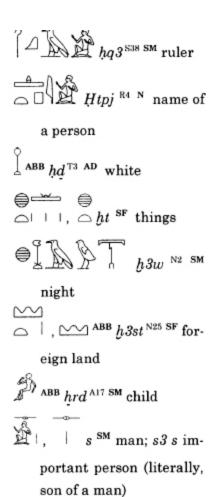
Abbreviations

ABB = abbreviated spelling P = preposition

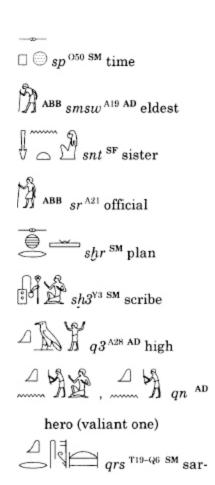
AD = adjective SF = substantive (feminine)

N = name SM = substantive (masculine)



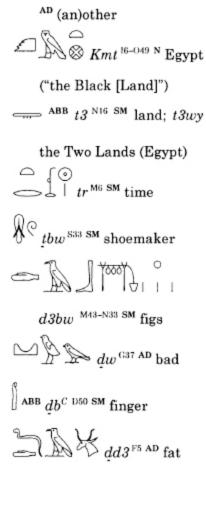


s3 G39 SM son



cophagus

k3 D52-E1 SM bull



→∭ →∭∯ _{kjj} like

LESSON 12 (§§ 3.1–25)

CHAPTER THREE PRONOUNS AND ADVERBS

1. Pronouns

3.1 The term "pronoun" is traditionally used to encompass a number of word types that differ in function from one another. English examples of pronouns are "he," "this," and "who?" The term "pro"-noun reflects the view that pronouns come "instead of nouns or substantives. Like substantives and adjectives, pronouns refer to entities. Three types of pronouns will be distinguished. Personal and demonstrative pronouns are discussed in this Chapter Three, interrogative pronouns in Chapter Four.

The words nb "all" and kjj "other," which are sometimes classified as pronouns,

have been described in Chapter Two together with adjectives. The numeral w^c "1," which precedes the substantive that it modifies, will be discussed with the numerals in Part 2 of this grammar. It can also mean "someone" and is then sometimes called an indefinite pronoun.

2. Personal Pronouns

a. Person, Gender, Number Words

- 3.2 Personal pronouns are words referring to one of the three "persons." "Person" is the conventional term for the three parties involved in the speech act: the "first" person, the "second" person," and the "third" person. The first person is the person who is speaking or writing (the "I" person). The second person is the person spoken or written to (the "you" person). The third person refers to anyone or anything else ("he," "she," "it," "they"). The first and second persons are typically human beings. The third person can be a person, an animal, or a thing. The third person is best regarded as a rest category or a residual category. It encompasses all that is neither the first person or speaker nor the second person or hearer.
- **3.3** In addition to person, personal pronouns also express gender and number. Singular personal pronouns refer to single entities: "I," "you," "she," and so on. Plural personal pronouns refer to plural entities, as follows.

"we" = "I and you both," "I, you, and she," and so on!

"you" = "you, you, and you," "you and they," and so on

"they" = "the three of them," "she and they," and so on

b. The Three Types of Personal Pronouns: Suffix, Dependent, Independent

3.4 In English, there are different ways of referring to the three persons. For example, the first person singular may be expressed by "I," "me," "my," or "mine." There is no difference in meaning

between these four words. They all refer to the first person. But the context in which they do so differs. Likewise, Egyptian has three sets of personal pronouns that do not differ with regard to meaning, but with regard to context.

suffix (personal) pronouns dependent (personal) pronouns independent (personal) pronouns

There is no one-to-one correspondence between Egyptian and English personal pronouns. That is, more than one Egyptian personal pronoun may correspond to a single English form. For

example, depending on the context, the suffix personal pronoun $\sum_{i=1}^{n} j_i$, the dependent personal

form. For example, depending on the context, "I," "me," and "my" may all be equivalents of $\coprod_{i=1}^{n} j$.

c. The Eight Combinations of Person, Gender, and Number

3.5 The three types of personal pronouns exhibit eight different combinations of the features person, gender, and number. Five combinations are singular, three are plural. The rare dual forms are disregarded here.

1 s	first person singular	"I, me, my, mine"
2ms	second person masculine singular	"you, your, yours"
2fs	second person feminine singular	"you, your, yours"
3ms	third person masculine singular	"he, him, his"
3fs	third person feminine singular	"she, her, hers"
lp	first person plural	"we, us, our, ours"
2 p	second person plural	"you, your, yours"
3 p	third person plural	"they, them, their, theirs"

Note also that the dependent personal pronouns exhibit a ninth combination.

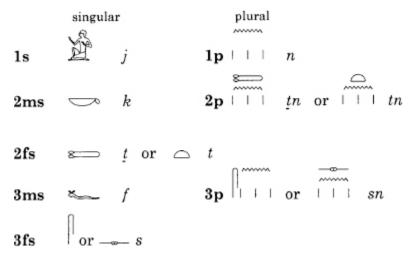
3s third person "neuter" "it"

3.6 As one can see in § 3.5, the singular has five forms (six for the dependent pronouns) and the plural has three forms. This difference in the number of forms between singular and plural is due to the fact that the second person and the third person have distinct masculine and feminine forms in the singular. In English, masculine and feminine are only distinguished in the third person singular ("he" and "she"). "You" refers to either a man or a woman. In Egyptian, different forms are used to address men and women as "you."

d. Suffix (Personal) Pronouns

¹ But not "I and I." In this sense, "we" is not quite the plural of "I." The term "first person plural" is therefore somewhat of a misnomer.

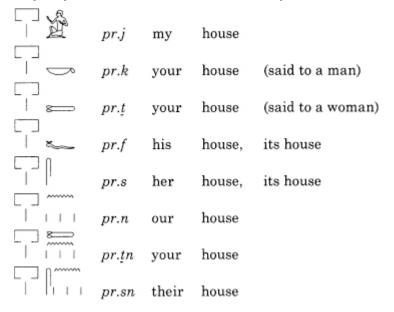
- 3.7 The forms are listed below. The forms are listed belo
- **3.8** Forms:



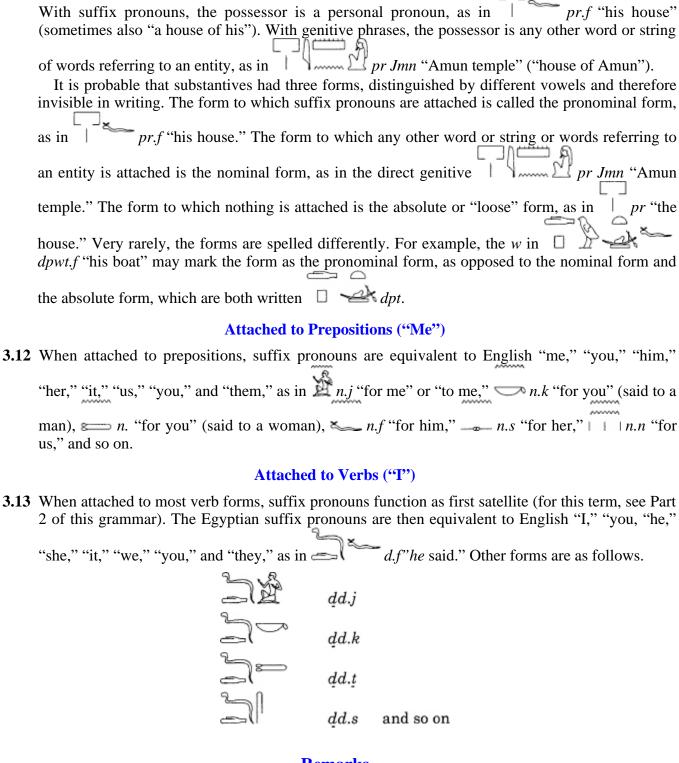
3.9 Suffix pronouns are inseparably attached to a preceding substantive, preposition, or verb (f(x)). In transcription, suffix pronouns are written together with the words to which they are attached. But they are separated from those preceding words by a period, as in f(x) pr.f "his house." In recent times, the transcription f(x) has also become common. If suffix pronouns are counted as separate words, then f(x) has also become common.

Attached to Substantives ("My")

3.10 When attached to substantives, suffix pronouns express possession. They are equivalent to English "my," "your," "his," "her," "its," "our," "your," and "their."



3.11 When following substantives, the suffix pronouns have the same meaning as the genitive phrase.



Remarks

- 3.14 The third person feminine singular form r, r s may denote abstract "it" ("its"), as in r "on account of it, there-fore," which features the preposition r "on (account of)."
- 3.15 Specific "it" is expressed by either f or f or

- 3.16 s "self, own" occurs only with suffix personal pronouns, as in Re Re self-his") or rn.j s.j "my own name" (literally, "name-my self-my").
- 3.17 When attached to dual substantives, the second and third person masculine singular suffix pronouns ((k and -f)) and the third person feminine singular suffix pronoun ((k s)) are often accompanied by (k s) as in (k s) in (k s)

e. Dependent (Personal) Pronouns

Note that suffix pronouns and dependent pronouns are written alike in the plural. Also, the plural may be written without "plural strokes." Thus, n and m "you" (plural) can be alternative writings for n and n "you" (plural) then resembles the second person feminine singular.

3.19 Like suffix pronouns, dependent pronouns closely follow a preceding word. But they are not inextricably attached to a preceding word as suffix pronouns are. Rather, they form a unit with one stress accent together with one or more words preceding them. In this sense, they depend on what precedes and are therefore called "dependent" pronouns.

Following Verbs ("Me")

3.20 Following verbs, dependent pronouns denote the direct object (for the direct object or second satellite, see Part 2 of this grammar). They are then equivalent to English "me," "you," "him," "her," "it," "us," "you," and "them."

Examples are
$$j_n v^{25} sw$$
 "bring him!" ($j_n is$ the imperative), $j_n is$ "bring er!", and $j_n is$ "bring it!".

Because dependent pronouns are not attached to a preceding word in the way that suffix pronouns are, one or more words may intervene between the verb and the dependent pronoun, as is

the case in $\lim_{n \to \infty} \frac{1}{n} \lim_{n \to \infty} \frac{1}{n$

Following Particles ("I")

3.21 Dependent pronouns can follow certain particles appearing at the head of adverbial sentences (for the adverbial sentence, see §§ 4.68-80). Dependent pronouns are then rendered as "I," "you," "he,"

"she," "it," "we," "you," and "they." An example of such a particle is 2m + mk "behold, look." It is followed by dependent pronouns in the following generic sentences.



Look (mk), I (wj) am here $(^{C}3)$.



Look, you are here. (Said to a man.)



Look, you are here. (Said to a woman.)



Look, he is here.

Two other particles that can be followed by dependent pro-nouns are nn and jsk.

Following Adjectives ("I")

3.22 Dependent pronouns can appear as the second component of adjectival sentences, following an invariable adjective as the first component (for the adjectival sentence, see §§ 4.56-67). Dependent pronouns are then rendered as "I," "you," "he," "she," "it," "we," "you," and "they." Generic examples are as follows.



You are well with me. (Good you with me.)

(A man speaking to a man.)

You are well with me. (Good you with me.)

(A woman speaking to woman.)

 $f = \frac{1}{2} \int_{0}^{\infty} \int_$

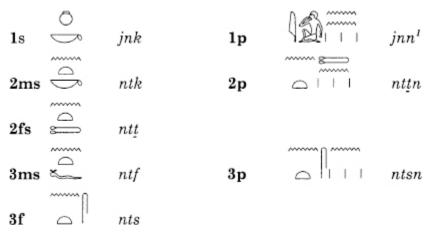
He is well with her. (Good he with her.)

She is well with him. (Good she with him.)

3.23 Dependent pronouns exhibit a special form for abstract "it," st. English specific "it," which refers to animals and things, corresponds to Egyptian sw or sy, depending on whether the substantive denoting the animal or thing is masculine (e.g. pr "house") or feminine (e.g. st "place").

f. Independent (Personal) Pronouns

3.24 Forms:

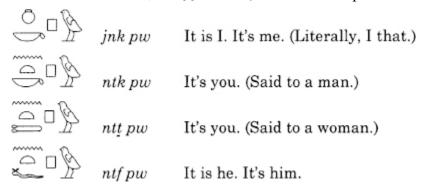


¹This form is not attested in texts dating to the time when Middle Egyptian was spoken.

Four older forms are as follows.

Note. — Here as elsewhere, \Longrightarrow alternates with \triangle and | with \Longrightarrow .

3.25 Independent pronouns are principally found at the head of substantival sentences (for the substantival sentence, see §§ 4.11-55). Generic examples are as follows.



QUESTIONS

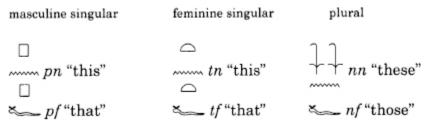
Transcription and Translation Exercise, English to Egyptian

1. my name 2. your name 3. her name 4. our name 5. my names 6. our names 7. a brother 8. my brother 9. my brother's house 10. his house 11. its door 12. his arm 13. his sister 14. her house 15. their father

LESSON 13 (§§ 3.26-33)

3. Demonstrative Pronouns

- **3.26** Demonstrative pronouns, or demonstratives, are words that locate entities in relation to the speaker or "I" person, as if by pointing. English examples are "this (one)," "that (one)," "these," and "those." The two main types are near demonstratives and far demonstratives. Near demonstratives point to that which is close to the speaker (close to "me"). An example is English "this." Far demonstratives point to that which is not close to the speaker. An example is English "that."
- **3.27** One set of each type is as follows.

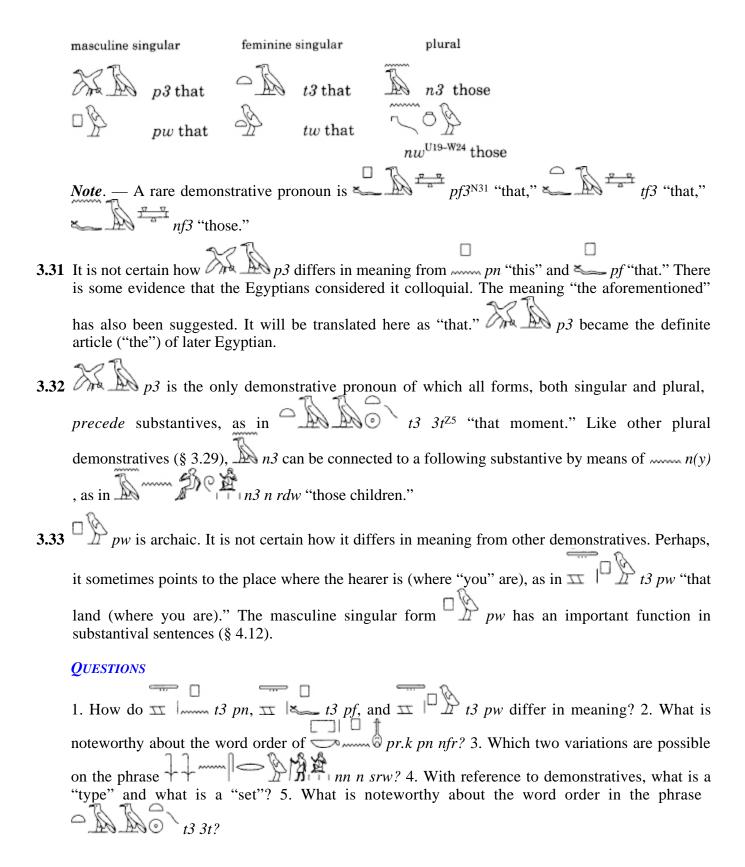


There are no separate masculine and feminine plural forms.

3.28 The behavior of singular demonstratives markedly differs from that of plural demonstratives. Singular demonstratives behave much like adjectives. Just as adjectives can refer to a property plus an entity *independently*, as in nfrt "good one," so can singular demonstratives, as in nfrt "good goddess" (literally, "goddess, good one"), so can singular demonstratives, as in nfrt "good goddess" (literally, "goddess, good one"), so can singular demonstratives, as in nfrt "good goddess" (literally, "goddess, good one"), so can singular demonstratives, as in nfrt "good goddess" (literally, "goddess, good one"), so nfrt "this land" ("land, this one"), nfrt "this place."

Adjectives *follow* singular demonstratives, as in pr.k pn nfr "this beautiful house of yours" ("house-your, this one, beautiful one"). They also *follow* nb "all, every."

- 3.29 Whereas singular demonstratives *follow* substantives, plural demonstratives *precede* substantives. Furthermore, plural demonstratives may or may not be connected with the substantive that they accompany by means of n(y). n(y) is present in n(y) is present in n(y) is present in n(y) in n(
- **3.30** Two more sets of demonstrative pronouns are as follows.



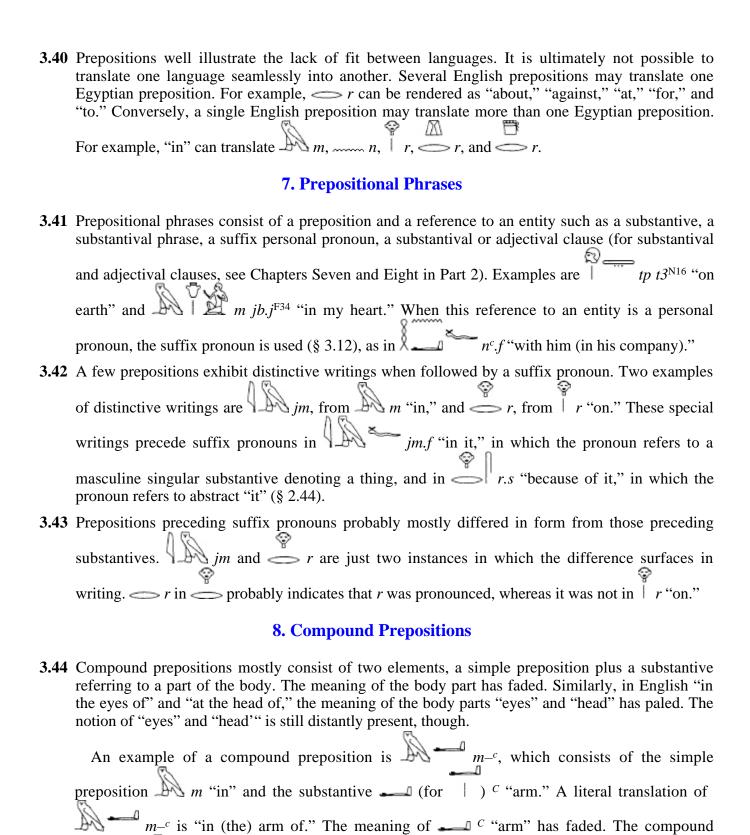
TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. this house 2. that house 3. this place 4. that place 5. these houses 6. those houses 7. these places 8. those places 9. this beautiful house 10. this beautiful place 11. that beautiful house 12. that beautiful place 13. this Amun temple (this house of Amun) 14. this beautiful Amun temple 15. this one 16. that one 17. this (thing) 18. these

LESSON 14 (§§ 3.34–45)

4. Adverbs

3.34			-	ces. Circumstances are by and large specifications of time, ties (see § 2.39), circumstances tend to change. An adverb
	of time is			erb of place is $c3^{N31}$ "here." An adverb of
	manner is	wrt very	, greatly.	
3.35	Some adverbs re	esemble ad	jectives in wri	iting.
		·	adjective	adverb
	† ~			
	8	nfr	good	well
	~~~~ n			
		$c_3$	great	greatly
	<u></u>	$m3^C$	true	truly, really
3.36	<del>229</del>	. ~~~~		tions. Examples are $n^c$ "therewith," from $n^c$ " $n^c$ "therewith," from $n^c$ $n^c$ "in front of."
			5. Ad	verbial Phrases
3.37	words denoting adverb	circumstar  mjn but als  sh example	o by the adv	cumstances. Adverbial phrases are strings of two or more ne circumstance "today" can be expressed not only by the erbial phrase — — — — — — — — — — — — — — — — — — —
			6.	Prepositions
3.38	Most adverbial of prepositions	phrases co	ntain a preport on," $m$	sition. They are therefore prepositional phrases. Examples "in," and $n^c$ "with (in the company of)." Adverbial
				ess common. Examples are $r^c$ $nb$ "every day" and
	$\square \otimes^{\parallel \parallel} sp^{O50} 4$	"four times	.,,	
3.39	conjunctions an	e "because	e," "if," "sind	orrespond to English conjunctions. Examples of English ce," "so that," "when," "whereas," and "while." Middle Instead, a clause such as "because he sees me" can be
			,	that he sees me," that is, by the preposition $r$ "on, on or the substantival clause, see Chapter Seven in Part 2).



preposition  $m^{-c}$  means "in the possession of," "together with," or "by."

3.45 Like simple prepositions, compound prepositions are followed by references to entities, as in

 $m 3t^{F4} rdw.f^{A17}$  "at the head of his children" (literally, "in the

119

front part of his children"). 3t rdw.f "front part of his children" is a direct genitive. An example of a compound preposition that does not include a body part is found in the expression "nmrwt.k" "for your sake" (literally, "for the love of you").

#### **CORE VOCABULARY**

#### **ADVERBS**

### PLACE

TIME

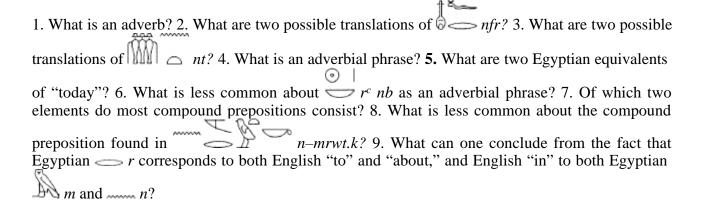
#### **MANNER**

#### **PREPOSITIONS**

#### **QUESTIONS**

¹ In the sense of "by means of."

² In the sense of "in the company of."



## TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

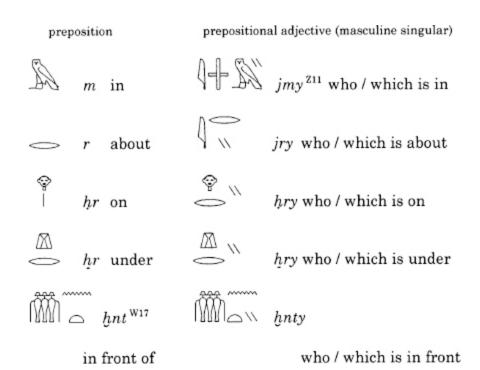
1. here 2. in this place 3. in it (referring to the place) 4. there 5. in that house 6. in my father's house 7. in it (referring to the house) 8. on it (referring to the house) 9. under it 10. with my sister 11. with her 12. for her 13. toward her 14. true 15. truly 16. today 17. on this day 18. formerly

# LESSON 15 (§§ 3.46-73)

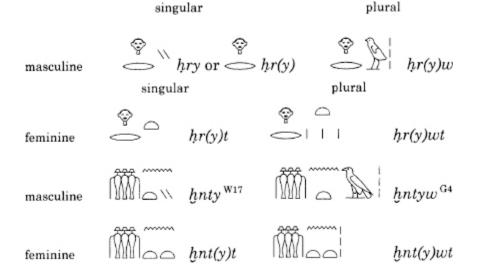
### 9. Prepositional Adjectives

#### a. Meaning and Form

- **3.46** Prepositional adjectives are relational adjectives derived from prepositions. They constitute one of two types of relational adjectives. The other type is derived from substantives and has been described above (§§ 2.46-53). Both types display the ending y. Relational adjectives derived from substantives can easily be compared to similar derivations in English. For example, the derivation of the adjective "salty" from the substantive "salt" resembles in many ways the derivation of Egyptian relational adjectives from substantives. Relational adjectives derived from prepositions, however, are quintessentially Egyptian. They are unlike anything found in English and cannot be translated literally.
- 3.47 For example, the ending y makes the preposition r "on" into the prepositional adjective ry. One possible spelling of this prepositional adjective is ry. This spelling exhibits the phonogram r as a phonetic complement and r which is the sign for heaven, as a determinative. Other, shorter, spellings are r and even just r or r or r.
- **3.48** The meaning of the prepositional adjective ry, which is derived from the preposition r "on," is something like "pertaining to the concept of 'on' or 'up'." Prepositional adjectives cannot be translated literally. It is often convenient to render them as relative clauses: "who is on ..." or "which is on...."
- **3.50** Other common prepositional adjectives are as follows. As one can see, the spelling of the relational adjective may differ from that of the preposition from which it is derived.

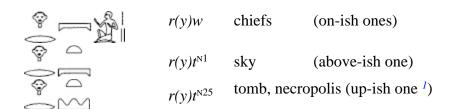


**3.51** Some writings of gender and number endings are as follows.



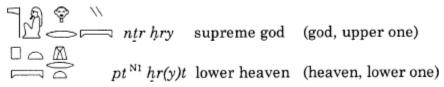
**b.** The Usages of Prepositional Adjectives

- 3.52 Like all adjectives, prepositional adjectives either refer to a property only (as in an entity (as in a
- **3.53** Adjectives refer to only a property when they are the first component in adjectival sentences. The adjectival sentence is described in Chapter Four (§§ 4.56-67). The prepositional adjective n(y) appears as first component in adjectival sentences expressing possession (§§ 4.155-83).
- **3.54** Prepositional adjectives referring to a property and an entity are used either independently or dependently. Examples of the independent use are as follows.



In writing, the determinatives specify that the entities are a man ( $\stackrel{\sim}{\square}$ ), a place in the sky ( $\stackrel{\sim}{\square}$ ), or a place in the desert ( $\stackrel{\sim}{\square}$ ).

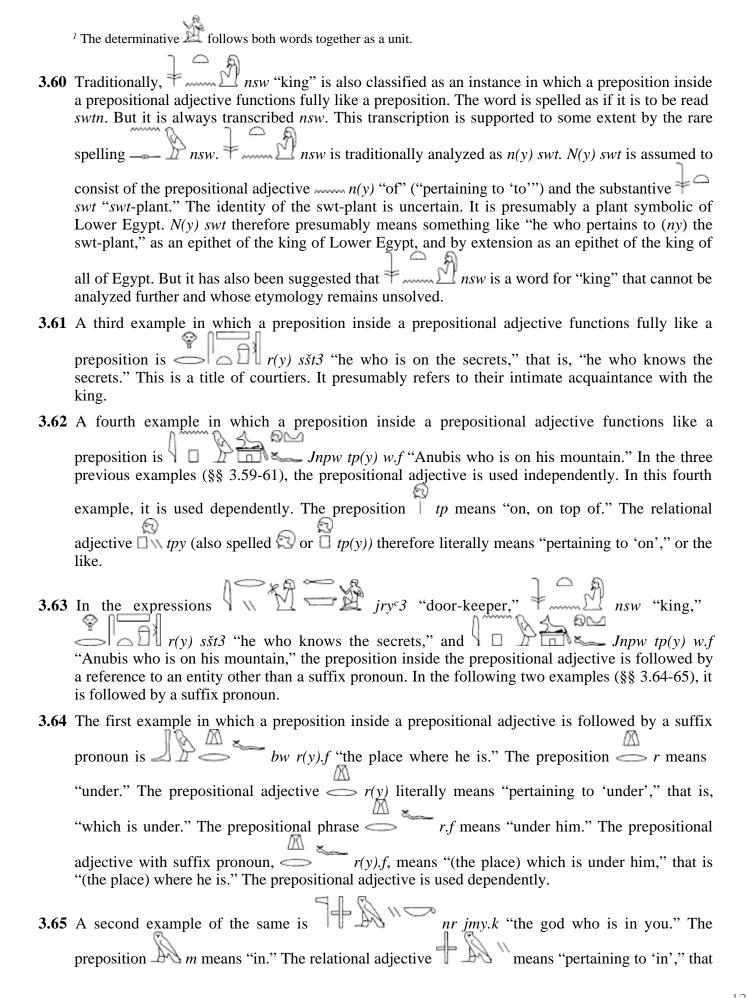
**3.55** Examples of the dependent use are as follows.



¹ Tombs are typically located in the desert, which is higher in elevation than the fertile and inhabited land.

### c. The Preposition in Prepositional Adjectives

- 3.56 Prepositions must be followed by a word or a string of words referring to an entity. For example, the substantive x = t3 "land" follows the preposition tp "on" in the adverbial phrase tp "with" in the adverbial phrase tp "with" in the adverbial phrase tp "with him."
- **3.57** When it comes to classifying the uses of relational adjectives derived from prepositions, three distinctions apply. The first distinction has already been introduced. Prepositional adjectives are adjectives. Adjectives are used independently or dependently (§§ 3.54-55). The second distinction is that the preposition does or does not retain the quintessential prepositional characteristic of being followed by a word or a string of words referring to an entity. The third distinction applies to the first option of the second distinction, that is, when the prepositional adjective does still behave like a preposition. In this case, the prepositional adjective is followed either by a suffix personal pronoun or by any other reference to an entity.
- 3.58 Two examples in which the preposition r that sits inside r to does *not* behave like a preposition are r (r) "chief," in which the prepositional adjective is used independently, and r in r in r in which the adjective is used dependently. Neither example states what someone is on. The preposition inside the prepositional adjective therefore does not function as a preposition by itself would.



is, "which is in." *jmy.k* means "which is in you." The prepositional adjective is used dependently.

# d. More on the Preposition in Prepositional Adjectives

3.66 Expressions such as if you have a jry have a "doorkeeper" and if nr jmy.k "god who is in you" are adjectival phrases. They consist of a prepositional adjective and a reference to an entity. They correspond to the adverbial phrases  $r^{c}$  "about the door" and jm.k "in you." them? Two answers are possible. The entities probably contract the same relation to the prepositional adjectives as they would to the prepositions from which these prepositional adjectives are derived. This would mean that "you" relates to the prepositional adjective jmy "who is in" just as it does to the preposition But in some cases, the reference to an entity following the prepositional adjective may well express possession, as in the genitive. After all, like substantives, adjectives refer to entities (in addition to referring to properties). Accordingly, width k in widtprepositional adjective ft(y) "enemy" (also spelled yfty z6) is derived from the preposition  $\leftarrow$  ft "against, opposite" and means "who is against." In this case,  $\sim$  k may well not function as it does in the corresponding prepositional phrase —

# e. The "Inverted" Use of Prepositional Adjectives

# i jmy rn.f "List"

3.67 The common expression f(y) f

*jmy* "pertaining to 'in' " is neutral in the following respect. It can be interpreted as either "which is in ..." or as "in which ... is."

# ii. , mr "Chief, Director"

- 3.68 Another possible example of the "inverted" use of prepositional adjectives is  $\stackrel{\text{left}}{=}$  mr "chief. director." This is an abbreviation of jm(y)r. It is composed of the prepositional adjective jm(y) and the substantive r "mouth, opening" (or "door"?). If the meaning of jm(y) is not "inverted," then  $\stackrel{\text{left}}{=}$  mr would mean "who is in the mouth (of his subordinates?)." But if jm(y) is "inverted," as it is in f(y) = jm(y) rn f "list," then f(y) = mr would mean "in whom the mouth is." Perhaps, the mouth is viewed as a tool for giving orders.
- **3.69** Mr "chief is also written playfully with"  $\downarrow$ , which depicts the tongue of an ox. This writing clearly suggests "that which is in the mouth" as a playful interpretation of jmy r. By this interpretation, jmy is not "inverted." This contrasts with the "inverted" interpretation of  $\mathbb{T}$ jm(y)r suggested in § 3.68 above. But perhaps, the non-"inverted" interpretation was limited to the playful pun only.

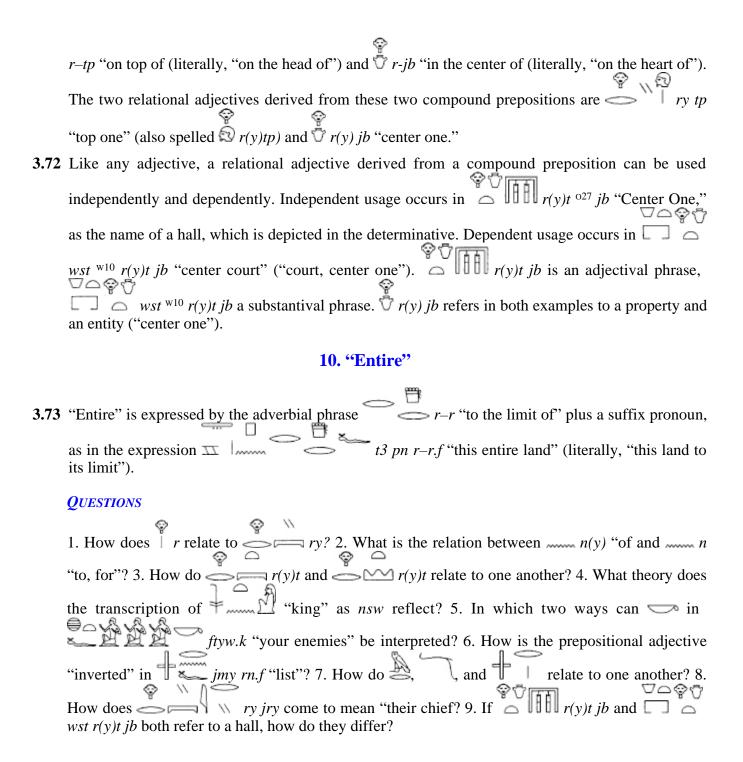
# f. A Special Use of \\ \ \ irv

**3.70** The prepositional adjective  $\sqrt[n]{jry}$ , derived from condots r "about," can be equivalent to "thereof" or "their." Like any adjective, \( \) \( \) jry may follow a reference to an entity. This reference may itself be a prepositional adjective, as in ry jry "chief thereof, their chief," literally, "top one thereof." ry jry is an adjectival phrase. ry and independently and / jry dependently. The adjective i j r i r i r i r i r i r i r i r i r i r i

effective remedy" (literally, "a remedy relevant thereto").

# g. Prepositional Adjectives Derived from Compound Prepositions

3.71 Prepositional adjectives derived from compound prepositions are derived from the simple preposition that is part of the compound preposition. Examples of compound prepositions are



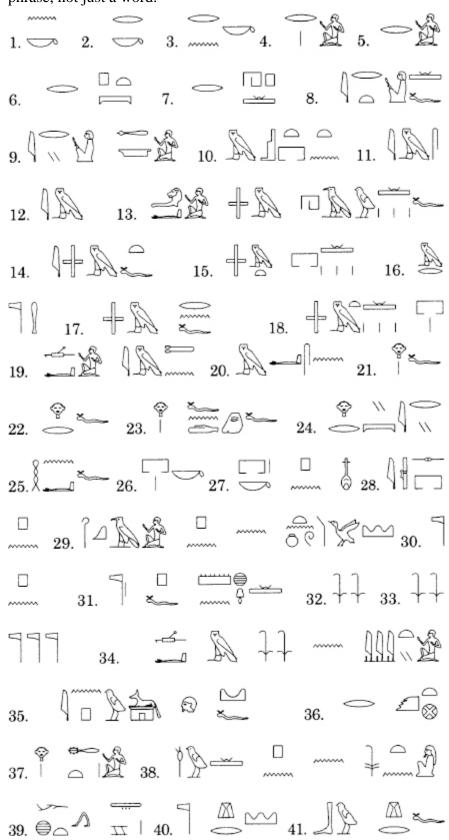
### Transcription and Translation Exercise, English to Egyptian

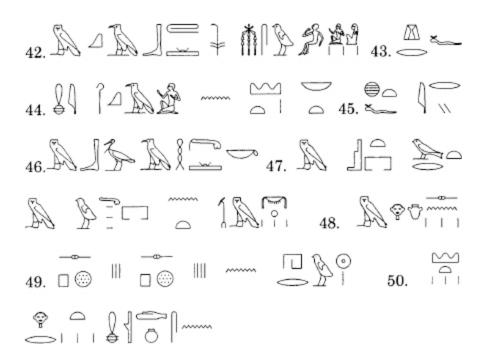
1. on 2. upper one (referring to a masculine entity) 3. upper one (referring to a feminine entity) 4. upper house (house, upper one) 5. supreme goddess (goddess, upper one) 6. their chief (upper one thereof) 7. in 8. in the house 9. in the entire house 10. which is in the house (referring to a feminine entity) 11. book which is in the house 12. on the book which is in the house 13. under 14. lower one (referring to a masculine entity) 15. under him 16. which is under him (referring to a masculine entity) 17. the place where he is (the place which is under him) 18. list 19. king 20. chief (expression featuring the word for "mouth")

### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

This exercise pertains to Lessons 12 to 15. The vocabulary follows the exercise. The functions of

the hieroglyphs can be derived, by way of exercise, from the list of signs on pp. 733-68 (with index at pp. 769-74). Be sure to identify word and phrase types. In **16**, a plural is spelled as a singular. In **19**, plural strokes are omitted (see § 3.18). **9**, **13**, **15**, and **42** exhibit determinatives determining a phrase, not just a word.



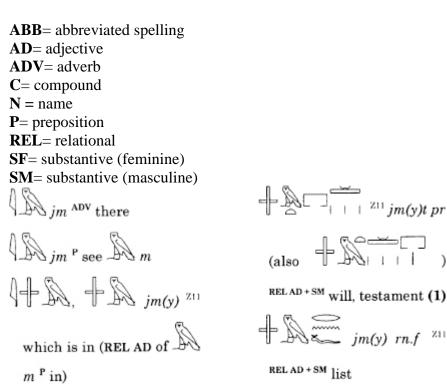


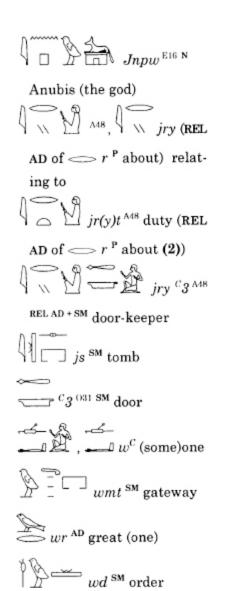
#### **VOCABULARY FOR THE PREVIOUS EXERCISE**

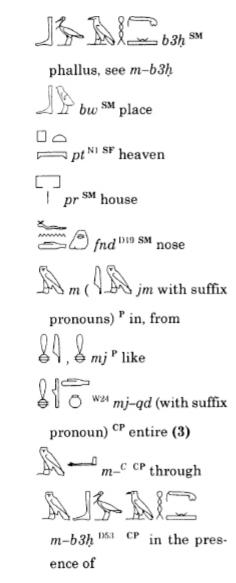
Words are listed in "alphabetical" order. This order is as follows:

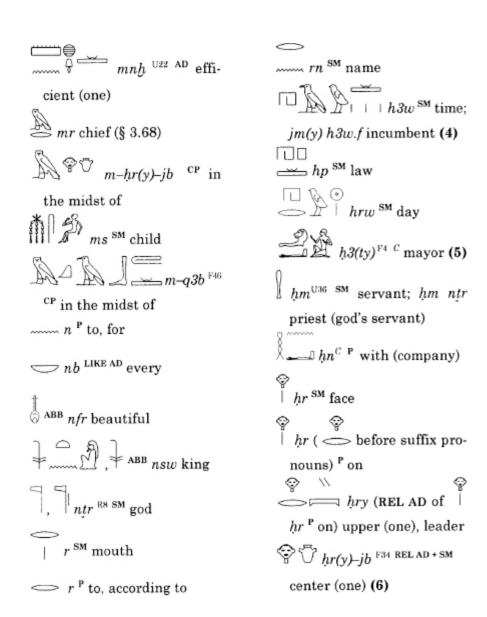
The feminine singular ending t is disregarded in classifying "alphabetically." Notes (1) to (8) are found on p. 179.

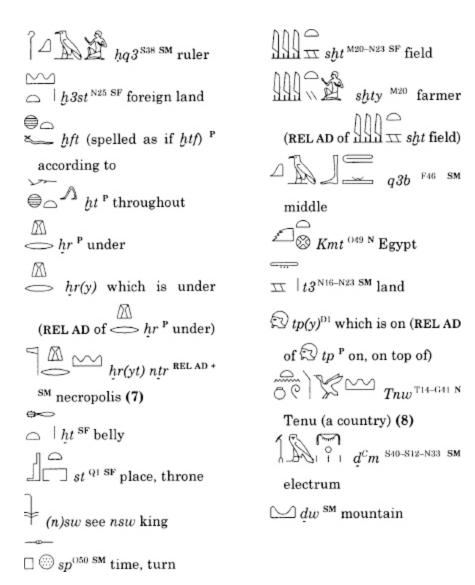
#### **Abbreviations**











#### NOTES TO THE VOCABULARY

- (1) If  $m \ pr$  "in the house"  $jm(y) \ pr$  "relating to 'in the house'," "who is in the house"  $jm(y) \ pr$  "that which is in the house."
- (2) r "about" r.f "about him" jry.f "relating to 'about him'" jry.f "relating to 'about him'" him'."
- (3) Literally, "like the character of."
- (4) Market m h 3w.f "in his time"  $\longrightarrow$  f m h 3w.f "who is in his time."
- (5) 3t "front part" 3ty "relating to the front," "who is in front" 3ty "who is in front with regard to activity" ("front-ish one of activity" [§§ 2.63-66]). 3ty "that which is in front" also means "heart."
- (6) Literally, "that which is on the heart."

- (7) Literally, "that which is under the god."
- (8) Also called Rtnw, with r.

## LESSON 16 (§§ 4.1–10)

# CHAPTER FOUR NON-VERBAL SENTENCES

# I. DESCRIPTION OF THE FOUR NON-VERBAL SENTENCE TYPES

#### 1. Sentence Types

- **4.1** Sentences are words or strings of words expressing complete thoughts. An example is "He arrived at school." In English, sentences typically begin with a capital letter and end in a period. Elliptical sentences are a special case. An example is "Yesterday," as an abbreviation of "He arrived yesterday" and an answer to "When did he arrive?"
- **4.2** No feature is more characteristic of the Egyptian language than the distinction between the sentence types. There are five sentence types: *substantival* sentence, *adjectival* sentence, *adverbial* sentence, *existential* sentence, and *verbal* sentence.
- **4.3** Four of the five sentence types are *non-verbal*: the substantival, adjectival, adverbial, and existential sentences. Non-verbal sentences are sentences that do *not need* to have a verb. From the Egyptian point of view, English sentences are always typically verbal: they typically contain verbs.

Consider the Egyptian adjectival sentence ( Infr pr.j "my house is beautiful" (literally, "beautiful house-my"). It does not have a verb. But its English equivalent does, namely "is."

### 2. Concept and Pattern of Sentence Types

**4.4** Language is a very large set of links between concepts and sound patterns (§§ 1.6-8). Sentence types cannot be an exception. Sentence types too must be links between a concept and a sound pattern. The definitions of the sentence types presented below reflect this. They are double definitions. To define a sentence type, one must define both its concept and its sound pattern (or short: pattern).

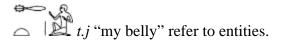
Two examples of concepts denoted by sentence types are as follows. The concept of the adjectival sentence type is to associate a property and an entity with one another, as in "My house is beautiful." The property "beautiful" and the entity "my house" are associated with one another. The concept of the adverbial sentence type is to associate a circumstance and an entity with one another. An English equivalent is "My brother is with me." The circumstance "with me" and the entity "my brother" are associated with one another. The corresponding sound patterns are defined in the detailed descriptions of the two sentence types below.

# 3. The Core of Sentence Types

**4.5** The core of a sentence type consists of the smallest number of elements that keep the sentence type a complete thought in all its instances. Thus, the core of "The capital of this country is in the East near the Atlantic Ocean" is "The capital is in the East," which is still a complete thought. When sentence types are defined below, it is their core that is defined.

# 4. Paradigms

4.6	Languages map the world around us. Three main facets of this world are entities, properties, and circumstances. Entities are fixed items. Some are perceivable, like "baker," "house," "table," and "window." Others are abstract, like "friendship" and "existence." Properties are attributes associated more or less permanently with entities, such as "red," "difficult," and "sunny." Circumstances describe situations in which entities—with or without properties attached to them—are found. Circumstances specify situations such as place (where?), time (when?), and manner (how?), as in "here," "tomorrow," and "quickly."
4.7	Entities are expressed by substantives such as $pr$ "house," by substantival phrases such as $pr$ "good god," or by substantival clauses (for which, see Chapter Seven in Part 2). Properties
	are expressed by adjectives such as nfrt "beautiful one," by adjectival phrases such as
	$nfr\ r$ "who has a beautiful face," or by adjectival clauses (for which, see Chapter Eight in
	Part 2). Circumstances are expressed by adverbs such as $a = a + b = $
	phrases such as $m$ st $tn$ "in this place," or by adverbial clauses (see Chapter Nine in Part 2).
4.8	Words or strings of words referring to the same facet of reality (entity, entity plus property, or circumstance) tend to occur in the same surroundings in sentences. They are then said to form a paradigm. Three main types of paradigms are substantival paradigms, adjectival paradigms, and adverbial paradigms. Thus, the following words and strings of words all refer to a circumstance. They form an adverbial paradigm.
	ADVERBIAL PARADIGM
	I found it there. yesterday. in the classroom. at 10 a.m. when we arrived there.
4.9	yesterday. in the classroom. at 10 a.m.
4.9	yesterday.  in the classroom.  at 10 a.m.  when we arrived there.  Substantival, adjectival, and adverbial words or strings of words may overlap. That is, one may encompass or envelop another. Three examples of overlap are as follows.  First, the substantival phrase nr nfr "good god" refers to an entity. But so does the
4.9	yesterday. in the classroom. at 10 a.m. when we arrived there.  Substantival, adjectival, and adverbial words or strings of words may overlap. That is, one may encompass or envelop another. Three examples of overlap are as follows.  First, the substantival phrase nr nfr "good god" refers to an entity. But so does the substantive that it encompasses, namely nr "god." And so does the adjective nfr "good one," which refers to an entity and a property.
4.9	yesterday. in the classroom. at 10 a.m. when we arrived there.  Substantival, adjectival, and adverbial words or strings of words may overlap. That is, one may encompass or envelop another. Three examples of overlap are as follows.  First, the substantival phrase nr nfr "good god" refers to an entity. But so does the substantive that it encompasses, namely nr "god." And so does the adjective nfr "good one," which refers to an entity and a property.
4.9	yesterday. in the classroom. at 10 a.m. when we arrived there.  Substantival, adjectival, and adverbial words or strings of words may overlap. That is, one may encompass or envelop another. Three examples of overlap are as follows.  First, the substantival phrase nr nfr "good god" refers to an entity. But so does the substantive that it encompasses, namely nr "god." And so does the adjective nfr "good one," which refers to an entity and a property.  Second, the adverbial phrase m st tn refers to a circumstance. But the substantival phrase that it encom passes, namely st tn "this place," refers to an entity.
4.9	yesterday. in the classroom. at 10 a.m. when we arrived there.  Substantival, adjectival, and adverbial words or strings of words may overlap. That is, one may encompass or envelop another. Three examples of overlap are as follows.  First, the substantival phrase or "good god" refers to an entity. But so does the substantive that it encompasses, namely or "god." And so does the adjective of "good one," which refers to an entity and a property.  Second, the adverbial phrase of the substantival phrase that it encompasses, namely of nearness to the speaker.
4.9	yesterday. in the classroom. at 10 a.m. when we arrived there.  Substantival, adjectival, and adverbial words or strings of words may overlap. That is, one may encompass or envelop another. Three examples of overlap are as follows.  First, the substantival phrase nr nfr "good god" refers to an entity. But so does the substantive that it encompasses, namely nr "god." And so does the adjective nfr "good one," which refers to an entity and a property.  Second, the adverbial phrase namely nr "god." And so does the adjective nfr "good one," which refers to an entity and a property.  Second, the adverbial phrase namely nr "god." And so does the adjective nfr "good one," which refers to an entity and a property.  Second, the adverbial phrase namely nr "god." And so does the adjective nfr "good one," which refers to an entity and a property.  Second, the adverbial phrase namely nr "god." Furthermore, the demonstrative nm the substantive namely nr "god." Furthermore, the demonstrative namely nr "god." The property namely nr "god." And so does the adjective namely nr "god." And so does the namely nr "god." And so does the namely nr "go



**4.10** In deference to tradition, the three terms "substantival," "adjectival," and "adverbial" have two meanings in this grammar. When they are combined with "sentence," their meaning is "whose *most characteristic member* is a word or string of words referring to an entity, a property, or a circumstance." Thus, an adverbial sentence is a sentence "whose *most characteristic member* is adverbial." When they are combined with "phrase" or "clause," the three terms mean "which *denotes or refers to* an entity, a property, or a circumstance." Thus, an adverbial phrase is a phrase "*denoting* a circumstance."

#### **QUESTIONS**

1. What is a sentence? 2. Which are the five main sentence types? 3. Of which two parts do the definitions of each sentence type consist? 4. What is the core of a sentence? 5. By which three types of words or strings of words are entities, properties, and circumstances expressed? 6. What is a paradigm? 7. Which are the two meanings of the terms "substantival," "adjectival," and "adverbial"?

# LESSON 17 (§§ 4.11–55)

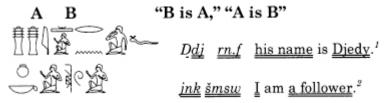
#### 5. The Substantival Sentence

#### a. Concept

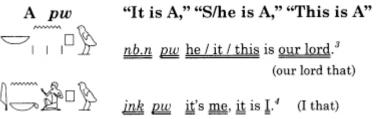
**4.11** Substantival sentences associate two entities with another. They *identify* someone or something and someone or something with one another. English equivalents are "John is a carpenter." "She is a lawyer," "This is John," and "It's me."

#### **b.** *Patterns* 1, 2, and 3

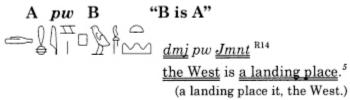
- 4.12 Substantival sentences exhibit one of three sound patterns. The patterns are distinguished according to two criteria. First, the core has two or three members. It is binary or ternary. Second, the core does or does not contain pw "that, it, he, she, they." pw is the masculine singular form of the demonstrative pronoun (§ 3.30). As a component of substantival sentences, it typically remains in the masculine singular.
- **4.13** Pattern 1, Pattern 2, and Pattern 3 look as follows (A and B are words or strings of words referring to an entity).
  - Pattern 1 has two members and does not contain pw:



• Pattern 2 has two members and contains  $p_w$ :



• Pattern 3 has three members and contains  $p_w$ :



¹ Westc. 7,1.

² Sin. R2.

³ Urk. IV 17,11.

⁴ CT VI 354q.

# c. De pw as an Enclitic Word

**4.14** pw is an enclitic word. The three other types of enclitic words are dependent pronouns, preposition pw is an enclitic word. The three other types of enclitic words are dependent pronouns, preposition pw is an enclitic word, pw occurs as early as possible in sentences, but not at the beginning. It intervenes between the first two words that can be separated from one another. If the first two words of a sentence form a unit with one accent, the enclitic word appears between the second and third words. Observe its position in the following examples of Pattern 2.

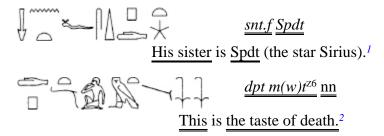
The *indirect genitive* phrase is separable. One says pr pw n jt.j "this is my father's house," and not pr n jt.j pw. An actual example is pr pw n jt.j pw

¹EP R1. The past tense "was" is implied from the context.

An *adjective* is also separated from the substantive it accompanies. But substantive and adjective are sometimes treated as a unit. Thus, one typically says pr pw nfr "this is a beautiful house," not pr nfr pw. By contrast, the *direct genitive* is always inseparable. One says nbt pr pw "this is the mistress of the house," not nbt pw pr.

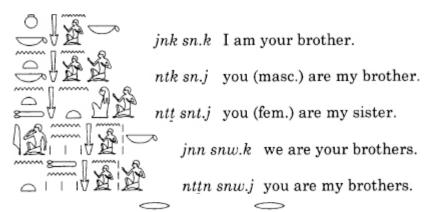
# d. Uses of Pattern 1

**4.15** Pattern 1, without  $p_w$ , is comparatively rare in Middle Egyptian. It was more common in older Egyptian.



¹PT341c. ²Sin. B23.

**4.16** Pattern 1 is common in *three* cases, however. In the *first* case, one of the two entities is an initial independent pronoun of the *first* person or the *second* person, singular or plural.



¹Gardiner EG 100,6.

**4.18** In the third case, both members contain the same substantive. A generic example would be  $pr.j \ pr.k$  "my house is your house." An actual example is as follows.  $mkt.t \ mkt \ R^c$  Your (fem. sing.) protection is the protection of Re.

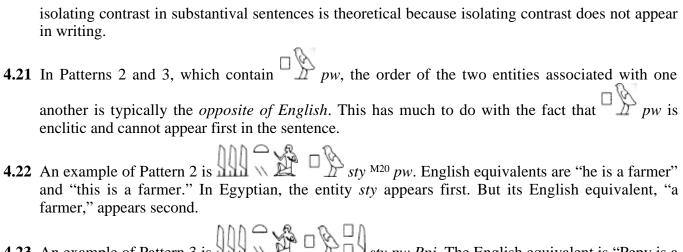
### e. Pattern 3 as an Extension of Pattern 2

Pattern 3 is in origin probably an extension of Pattern 2. An example of a substantival sentence of Pattern 3 already cited on p. 188 is a landing place." This sentence can be analyzed as an instance of Pattern 2, namely pw "it is a landing place," to which the member with Jmnt "the West" is added. A literal translation reflecting this analysis would be "a landing place is that ( dmj pw), (namely) the West ( Manually)."

# f. Order of the Members in Patterns 2 and 3 without Isolating Contrast

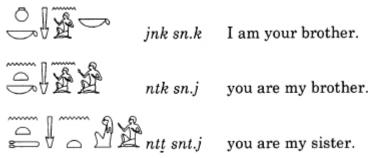
**4.20** Basic substantival sentences are those that do not express isolating contrast. Isolating contrast is defined below. Elsewhere in Egyptian, the presence of isolating contrast visibly affects sentences in fundamental ways. Sentences containing isolating contrast therefore as a rule require separate treatment. It is assumed that substantival sentences are no exception. Substantival sentences containing isolating contrast are therefore described separately below. But the treatment of

¹ Mutter und Kind verso 4,7.



# g. Order of the Members in Pattern 1 without Isolating Contrast

**4.24** The order of the entities is the *same as in English* when the first member is an initial independent pronoun first or second person singular or plural. Thus, "I" and "you" as well as *jnk*, *ntk*, and *nt* appear in first position in the following examples.



and so on (see § 4.16 above)

### h. Isolating Contrast

not have isolating contrast [see below]), the order differs in English.

- **4.26** Isolating contrast is a subtle and distinctive phenomenon that is ubiquitous in every language. Speakers are hardly aware of the phenomenon, even if they apply it in just about every other sentence in certain types of speech, for example in dialogues that have many questions and answers.
- **4.27** Isolating contrast is applied to individual members of a sentence. Applying isolating contrast to a certain member of a sentence has much of turning a spotlight on that member. Consider the sentence "Pepy is a farmer." By turning the spotlight on "a farmer," one obtains "Pepy is a farmer." If one turns the spotlight on "Pepy," the result is "Pepy is a farmer."

- **4.28** Everything in language is dual, consisting of a concept and a sound pattern. Isolating contrast is no exception. Its concept is to contrast an element with and isolate it from other elements of the same class. Isolating contrast marks elements *as distinct from and at the exclusion of other elements*. For example, the statement "Pepy is *a farmer*" conveys that Pepy is *not* some thing else. The contrast does not need to be strong. It is subtle, yet very distinctive.
- **4.29** Isolating contrast can be *specific*. For example, "Pepy is *a farmer*" may imply that Pepy is *not* a scribe. Isolating contrast can be *general*. For example, "Pepy is *a farmer* may imply that, of all possible professions, Pepy is a farmer.
- **4.30** Questions for specification (§§ 4.87-98) as a rule involve isolating contrast. Isolating contrast rests on the element that is asked for. This element is expressed by a question word ("who?", "which?", "what?", "where?", "when?"). Isolating contrast also rests on the elements that provide the answer to these question words.
- **4.31** The concept of isolating contrast has been defined. What is its sound pattern? In modern English, the most common sound pattern is difference in *intonation*. Isolating contrast is applied to an element by pronouncing it with a higher pitch—however subtle this rise in pitch. For example, if I ask someone, "When are you coming?", and the person answers, "I'll be there in five minutes," isolating contrast has inevitably been used twice. Both "when?" and "in five minutes" must be pronounced with a slightly higher pitch in a question-and-answer setting. This rise in pitch, however slight, denotes isolating contrast.
- **4.32** In writing, intonation can be expressed by italics, as in "When are you coming?" and "I'll be there in five minutes." Or it can be expressed by underlining, as in "When are you coming?" and "I'll be there in five minutes." But italics and underlining are not often used nowadays in modern English. If isolating contrast cannot be seen in writing, only heard in speech, its presence in writing must be inferred. As suggested below, this always applies with Middle Egyptian substantival sentences.
  - Italics and underlining are in danger of making isolating contrast seem too strong. Isolating contrast is distinct and discrete as a phenomenon, but it is mostly also delicate. Italics will be used below more than would otherwise be desirable, but only for the sake of clarity.
- **4.33** One helpful tool in inferring the presence of isolating contrast is the *context*. Suppose "Pepy is a farmer" is preceded by "Is Pepy a scribe? No, ...." From this context, it is obvious that we must understand "Pepy is *a farmer*." The context allows us to infer the presence of isolating contrast.
  - But the context is only an emergency tool. If we knew exactly how "Pepy is a farmer" is pronounced, we would need no context. On the contrary, from the exact pronunciation of "Pepy is a farmer," we could reconstruct roughly what kind of context would be suitable for the sentence.

#### i. Isolating Contrast in Substantival Sentences

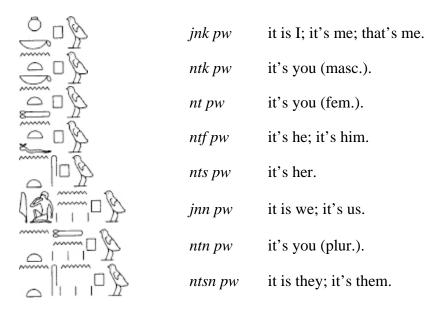
- **4.34** The addition of isolating contrast to a sentence affects that sentence in a fundamental way. It makes that sentence into the potential answer to a question for specification ("who?", "which?", "wher?", "where?"). Sentences exhibiting isolating contrast require special treatment.
- **4.35** It will be seen later in this grammar how certain patterns are visibly and exclusively devoted to the expression of isolating contrast. These special patterns demonstrate the need to treat sentences containing isolating contrast separately. The same ought to apply to substantival sentences exhibiting isolating contrast. But there is a problem.
- **4.36** It is assumed here that isolating contrast is expressed in substantival sentences by intonation. This reasonable assumption cannot be proven because we have no record of spoken Egyptian. Furthermore, differences in intonation cannot be expressed in hieroglyphic writing. The following account of isolating emphasis in the substantival sentence is therefore theoretical.

### j. Substantival Sentences of Pattern 2 with Isolating Contrast

**4.37** A generic example of a substantival sentence of Pattern 2 is sty pw. If no isolating contrast is applied to sty "farmer," the substantival sentence may be translated as "he is a farmer" or "he's a farmer." Note again the difference between Egyptian and English in the word

order of the entities. Note also that  $p_w$ , being an enclitic word, cannot receive isolating contrast.

**4.38** Isolating contrast seems always present in Pattern 2 when the first member is an initial independent personal pronoun. The eight sentences in question are as follows.



# k. Substantival Sentences of Pattern 3 with Isolating Contrast

- **4.39** A generic example of Pattern 3 is sty pw Ppj. This example may or may not exhibit isolating contrast. The difference cannot be seen in hieroglyphic writing. But it could presumably be heard in speech. When assuming the presence of isolating contrast, it is useful to imagine possible contexts for the sentence. Contrast on an element after all requires something to contrast that element with.
- **4.40** If the example does *not* exhibit isolating contrast, it is translated as "Pepy is a farmer." As noted in §§ 4.21-23, the Egyptian word order typically differs from the English word order when no isolating contrast is present. The reason may be that this example of Pattern 3 envelops an instance of Pattern 2, namely *sty pw* "he's a farmer" (see § 4.19).
- **4.41** If isolating contrast is applied, two main possibilities exist. In English, "Pepy is a farmer" can be converted both into "*Pepy* is a farmer" and "Pepy is a farmer." The results can be viewed as answers to a question for specification ("who?", "what?"). In Egyptian too, there would seem to be two possibilities.

Isolating contrast may apply to Sty. Possible translations are as follows (a thinkable context is provided between parentheses): "Pepy is *a farmer* (not a scribe)" and "Pepy is *the farmer* (not the scribe)." These translations can be viewed as answers to the question "What is Pepy?" Isolating contrast may apply to Ppj. Possible translations are as follows: "Pepy is a farmer"

(not his friend), "The farmer is Pepy" (no one else), and "Pepy is the farmer." These translations

### 1. Interpreting Instances of Pattern 3

- **4.42** The interpretation of instances of Pattern 3 is a difficult and precarious undertaking. The information that is required to perform the task adequately is forever lost. It is therefore necessary to make certain assumptions. Three possible solutions must be considered for each instance of Pattern 3. It must be assumed that each of these three solutions would be pronounced differently. The context is crucial in weighing the three options. But again, if we knew how a substantival sentence was pronounced, we would not need the context to decide on a solution. To the contrary, we could posit a certain type of context for a certain pronunciation.
- 4.43 An example of Pattern 3 is wp(w)t.j pw nsw.¹ Assuming no isolating contrast, the translation would be "Khonsu is my messenger." But if isolating contrast affects nsw "Khonsu," possible translations would be "Khonsu is my messenger" or "my messenger is Khonsu." The English word order tends to matter less if there is isolating contrast, as long as intonation marks which element receives isolating contrast. If isolating contrast affects wp(w)t.j "my messenger," one possible translation would be "Khonsu is my messenger."

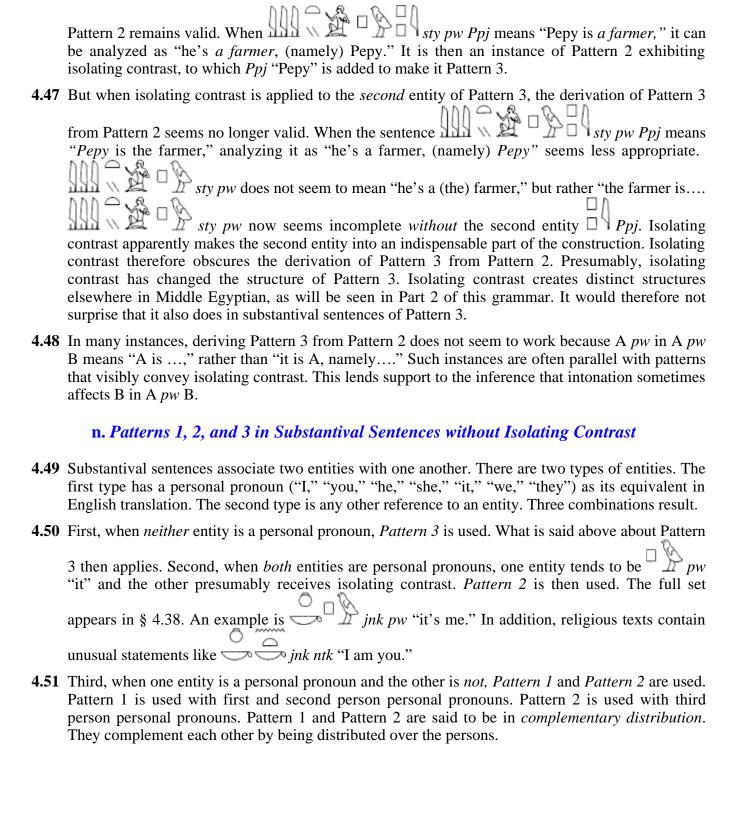
¹ CT VI 179g. ² CT III 47e. The first person suffix pronoun is written.

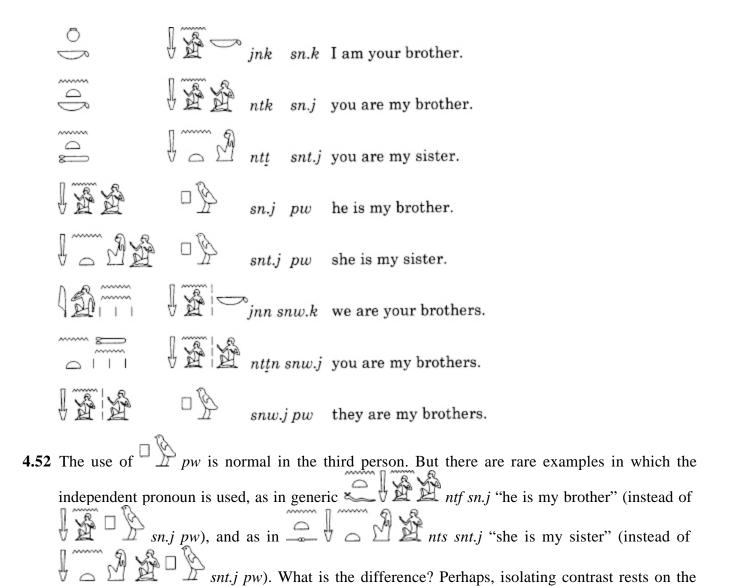
can be viewed as answers to the question "Who is the farmer?"

4.44 One instance of a well-known expression is well-known expression. The author seems to state what it is of all things that he hates. Isolating contrast would hence seem to rest on well-known expression is well-known expression. The author seems to state what it is well-known expression is well-known expression. The author seems to state what it is well-known expression expression is well-known expression. The author seems to state what it is well-known expression expre

# m. Instances of Pattern 3 with Isolating Contrast on the Second Entity, and Their Relation to Pattern 2

- 4.45 As noted earlier, isolating contrast can affect either the first entity or the second entity of instances of Pattern 3. Sty pw Ppj may mean either "Pepy is a farmer" or "Pepy is the farmer." This difference in meaning presumably corresponds to a difference in intonation.
  - It was suggested that Pattern 3 is an extension of Pattern 2 (§ 4.19). But it was also suggested that the application of isolating contrast profoundly affects the structure of a sentence, even if this is not the case in the substantival sentence.
- **4.46** When isolating contrast is applied to the *first* entity, the analysis of Pattern 3 as an extension of

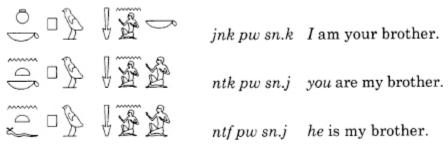


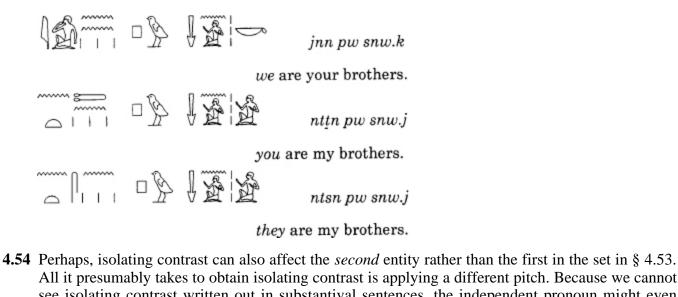


## o. Other Uses of Pattern 3, Possibly with Isolating Contrast

independent pronoun. The translations would then be "he is my brother" and "she is my sister."

**4.53** The following set of eight sentences belongs entirely to Pattern 3. The first entity is always an independent pronoun. The set is similar to the one in § 4.51, which mixes Patterns 1 and 2. One likes to think there must be some difference between the two. Perhaps, isolating contrast affects the first entity in the set below.





All it presumably takes to obtain isolating contrast is applying a different pitch. Because we cannot see isolating contrast written out in substantival sentences, the independent pronoun might even receive isolating contrast in the examples in § 4.51, as in *jnk sn.k* "I am your brother."

## p. Apposition in the Substantival Sentence

The difference in translation does not correspond to a difference in the hieroglyphic writing. One assumes that the difference was heard in speech. This again confirms the suspicion that there are many nuances in substantival sentences that are not conveyed by hieroglyphic writing.

#### **QUESTIONS**

1. What is the concept of the substantival sentence? 2. By which two criteria are the three patterns of the substantival sentence distinguished and which are those three patterns? 3. How does the status of pw as an enclitic word affect its position in the sentence? 4. Which are the three usages of the rarer Pattern 1? 5. How can Pattern 3 be derived from Pattern 2? 6. How does the order of the entities in Egyptian compare to that of English in Patterns 2 and 3 without isolating contrast? 7. How does the order of the entities in Egyptian compare to that of English in Pattern 1 without isolating contrast? 8. What is the concept of isolating contrast for any pattern in any language? 9. What is the presumed sound pattern of isolating contrast in Egyptian substantival sentences? 10. How does the meaning of Pattern 2 differ depending on whether the first entity bears isolating contrast or not? 11. Which are three basic ways of interpreting Pattern 3 in light of the

presence or absence of isolating contrast? 12. What disturbs the relation of derivation between Pattern 3 and Pattern 2 when the second entity of Pattern 3 receives isolating contrast? 13. How are Patterns 1, 2, and 3 used in substantival sentences without isolating contrast? 14. How can the

sentence *jnk pw sn.k* be interpreted as either Pattern 2 or 3?

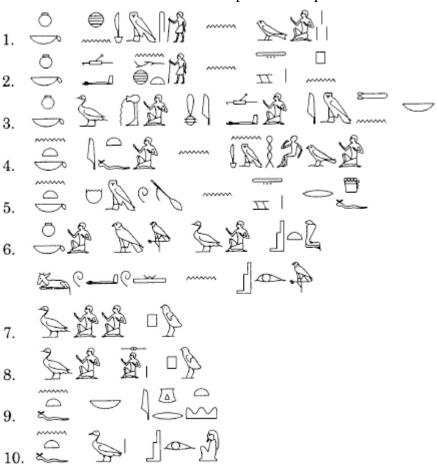
## Transcription and Translation Drill, English to Egyptian

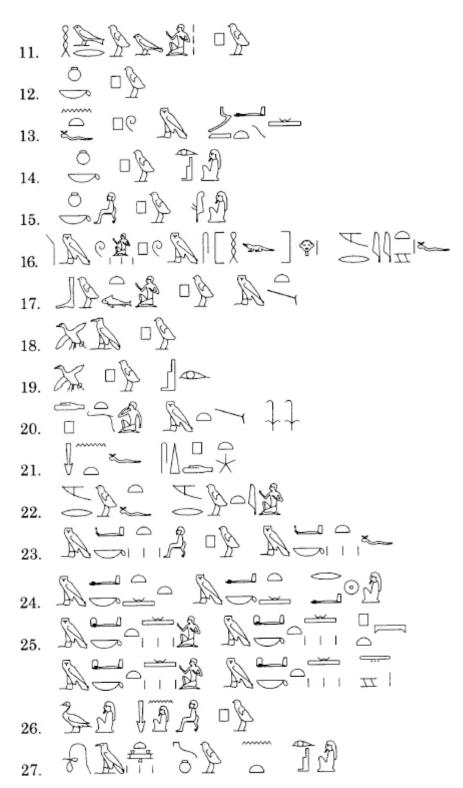
1. "It is I" ("it's me," "that's me"), "it is you (masc.)," "it is you (fem.)," and so on (8 sentences). 2. "It is my son," "it is your (masc.) son," "it is your (fem.) son," and so on (8 sentences). 3. "They are my daughters" ("it's my daughters"), "they are your (masc.) daughters," "they are your (fem.) daughters," and so on (8 sentences). 4. "I am your brother / sister," "you (masc. / fem.) are my brother / sister," and so on (12 sentences). 5. "I am your father," "you are my father," "you are my mother," and so on (singular only, 5 sentences).

## TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

The vocabulary is listed on pp. 320-28. Identify the substantival sentence pattern (1, 2, or 3) and the core members of each sentence. In 3, the determinative of the third word probably determines the second and third word together as a unit; also, the 2p suffix pronoun lacks plural strokes. The

square brackets in 16 denote signs lost and restored. The 1s suffix pronoun j is spelled  $\bigcirc$  in 22 and  $\bigcirc$  in 23 and 26. The 2fs suffix pronoun is spelled  $\bigcirc$  t in 24.





Sources: 1. Les. 80,22. 2. Les. 82,6. 3. Les. 94, 10-11. 4. EP B1,62. 5. EP B1,267. 6. Ram. IX 2,9-10. 7. Berl. ÄI I 258,8 (Berl. 1157,18). 8. EP R39. 9. BD 14 Budge 1898, 38,9. 10. CT IV 37f. 11. Berl. ÄI I 258,3 (Berl. 1157,13). 12. Reden 17, 23, 24. 13. Sin. B267-68. 14. CT III 261d. 15. CT II 3d. 16. Merikare Len. 9,5-6. 17. CT I 173i. 18. Rhind 60. 19. RT 39, 121. 20. Sin. B23. 21. PT 341c. 22. CT VII 171e. 23. CT VII 308a. 24. Mutter und Kind verso 4,7. 25. Ram. X 1,2. 26. CT II 166d. 27. CT VII 282b.

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. It is I. 2. It / He / This is a peasant. 3. They are peasants. 4. I am a peasant. 5. You are peasants. 6. I am a peasant of Egypt. 7. It / He / This is a peasant of Egypt. 8. They / These are peasants of Egypt. 9. That man is a peasant. 10. Those men are peasants. 11. *I* am the peasant (not someone else) 12. I am a *peasant* (not something else).

## LESSON 18 (§§ 4.56-67)

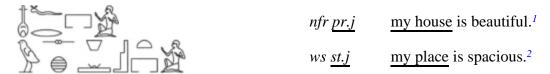
## 6. The Adjectival Sentence

## a. Concept

**4.56** Adjectival sentences associate a property and an <u>entity</u> with one another. English equivalents are "The weather is beautiful," "Tomatoes are red," and "It's good."

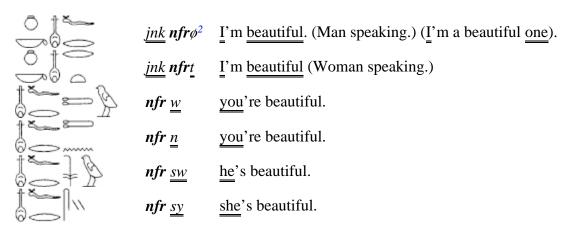
#### b. Pattern

**4.57** In the adjectival sentence, an invariable adjective is followed by a word or string of words referring to an entity.



¹ Sin. B155.

- **4.58** Perhaps, the adjective is invariable because it refers to a property only ("good"), not to a property plus an entity ("good one"). Likewise, in German, one says *Das Haus ist schön* "the house is beautiful," but *schönes Haus* "beautiful house"; and in Old English, *his modor wæs cristen* "his mother was christian," but *cristnu gesamnung* "christian church."
- persons. An example is nfr tw n^c.j "you are well-off with me" 1 ("good you with me"). But for the *first* person, Pattern 1 of the substantival sentence is used. The adjectival sentence and Pattern 1 of the substantival sentence are said to be in *complementary distribution* (cf. § 4.51).

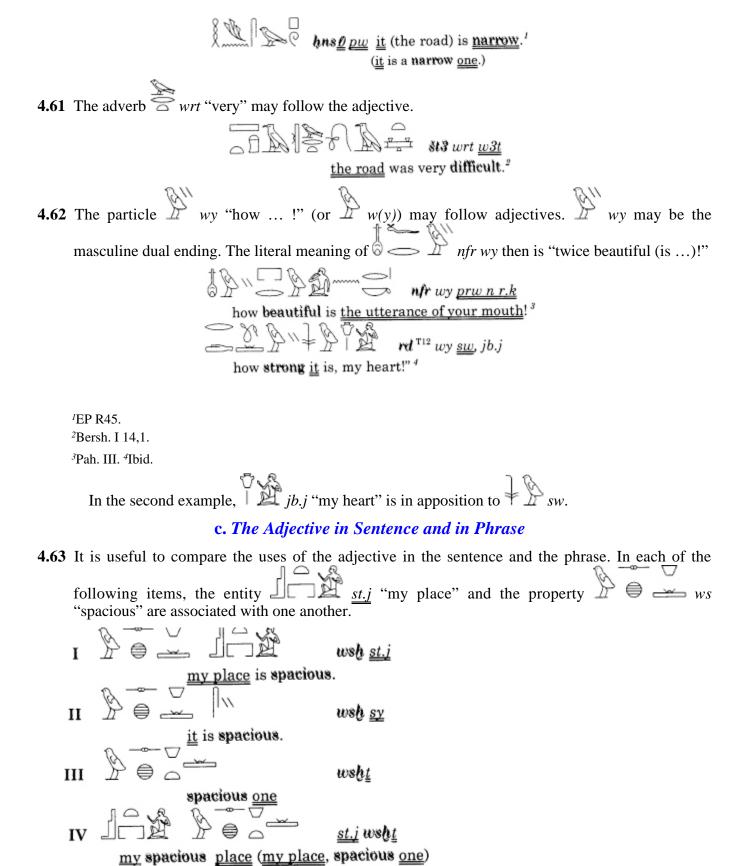


¹ Sin. R55.

**4.60** Pattern 2 of the substantival sentence may serve as an approximate equivalent of the adjectival sentence.

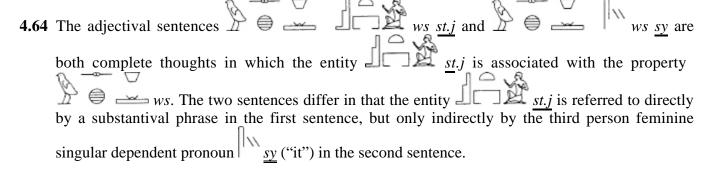
² Ibid.

² ø(zero) marks the significant absence of an ending.

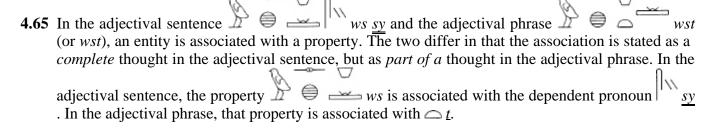


The following comparisons clarify how the same association is presented differently in I, II, III, and IV.

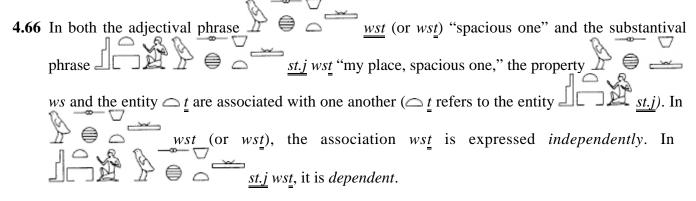
## I and II in § 4.63 Compared



## II and III in § 4.63 Compared



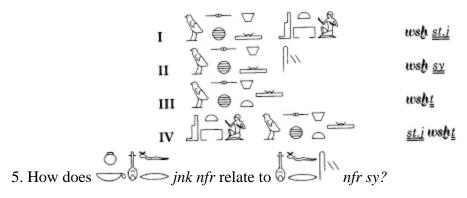
## III and IV in § 4.63 Compared



## d. Comparative Degree

#### **QUESTIONS**

1. What is the concept of adjectival sentences? 2. What is the pattern of adjectival sentences? 3. Why are adjectives invariable in adjectival sentences? 4. How do the following four items relate to one another?



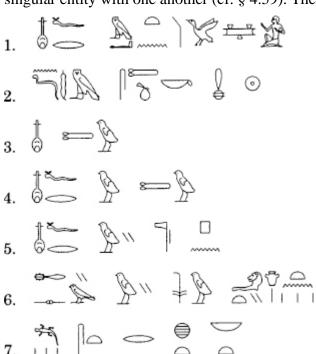
#### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN

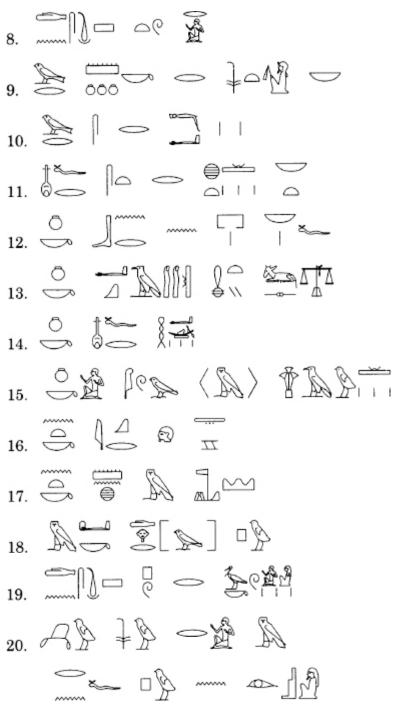
"I am big," "you (masc.) are big," "you (fem.) are big," and so on (9 sentences, including "it").

¹ CT I 178d.

#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

The vocabulary is listed on pp. 320-28. Identify the core members of each sentence. The two strokes at the end of **10** denote the number "2." They are transcribed "2" and pronounced "two" by convention. The pointed brackets in **15** mark a word supplied by modern editors. In **16** and **17**, Pattern 1 of the substantival sentence is used to associate a property and a second (!) person singular entity with one another (cf. § 4.59). The square brackets in **18** mark a restoration.





Sources: 1. EP B1,3. 2. PT 1802a. 3. CT I 311g. 4. PT 1450a. 5. CT IV 117e. 6. Nominalsatz 60 (Rougé Inscr. hiér. 218,39). 7. Urk. IV 693,8. 8. Kah. 3,33. 9. Urk. IV 618,15. 10. Sh.S. 63-64. 11. Sh.S. 134. 12. Les. 81,4. 13. Les. 81,6-7. 14. Les. 79,23. 15. Sh.S. 12-13. 16. JEA 20, 158 (Louvre E6134,8). 17. Ibid. 18. Urk. IV 1087,9. 19. Adm. 4,14. 20. CT I 178d.

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. I am beautiful. 2. You are beautiful. 3. S/he is beautiful. 4. I am a beautiful man / woman. 5. You are a beautiful man / woman. 6. S/he is a beautiful man / woman. 7. My sister is a beautiful woman. 8. My brother is a beautiful man. 9. It is beautiful. 10. My house is beautiful. 11. My beautiful house. 12. How beautiful you (masc. sing.) are! 13. How beautiful your house is! 14. You (masc. sing. / fem. sing.) are wery beautiful. 15. You (masc. sing. / fem. sing.) are more beautiful than them. 16. They are more beautiful than you (plur.).

## LESSON 19 (§§ 4.68-82)

#### 7. The Adverbial Sentence

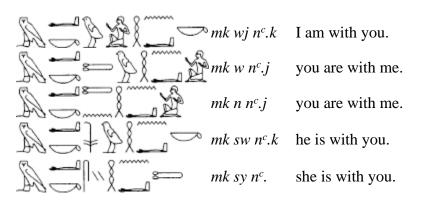
#### a. Concept

- **4.68** Adverbial sentences associate a <u>circumstance</u> and an <u>entity</u> with one another. They situate <u>somebody or something in a circumstance</u>. English equivalents are "<u>He</u> is <u>over there</u>" and "<u>Paris</u> is <u>in France</u>."
- **4.69** Of the three main types of circumstances, place (where?), time (when?), and manner (how?), adverbial sentences typically feature circumstances of place (where?).

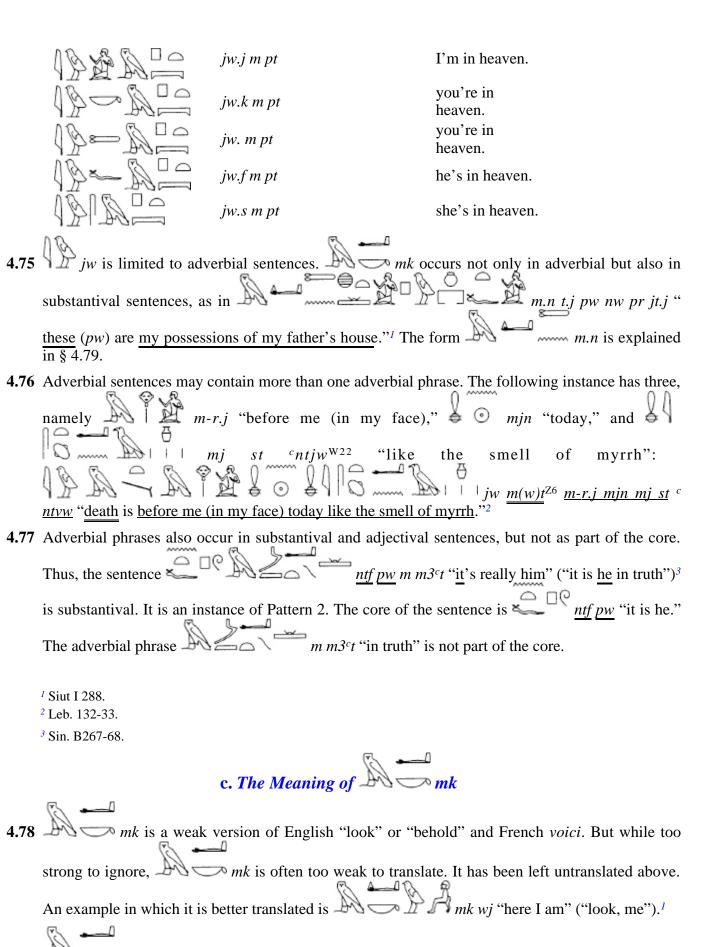
#### b. Pattern

- 4.70 The two main members of the core of the adverbial sentence are a word or string of words referring to an entity followed by a word or string of words referring to a circumstance. An example is king Amenembat's name:

  Jmn-m-3t "Amun is in front."
- 4.71 In addition, adverbial sentences typically have a third member: a particle preceding the two main members. Two particles that are often found at the beginning of an adverbial sentence are *jw* and *mk*. The latter is also spelled An example of *jw* is found in the generic sentence *jw sn.k m pt* "your brother is in heaven." An example of *mk* is found in the generic sentence *mk snt.j n^c.k* "my sister is with you."
- **4.72** Adverbial sentences must be introduced by a particle when the core entity is a personal pronoun.
- **4.73** When the core entity is a personal pronoun, mk is followed by *dependent* pronouns, as follows.



**4.74** When the core entity is a personal pronoun, the particle  $\bigvee_{i=1}^{n} jw$  is followed by *suffix* pronouns, as follows.



 $\nearrow$  mk "look!" tends to be invariable, whether a man, a woman, or more than one person is

addressed. However, the member  $\longrightarrow k$  is in origin the second person masculine singular suffix

pronoun. Accordingly, mk (m.k) is occasionally, especially in earlier texts, used to address specifically a male person. A woman can then be addressed by the form m (m.), which contains the second person singular suffix pronoun, and more than one person can be addressed by the form m (m.n), which contains the second person plural suffix pronoun. Variant spellings of these last two forms occur.

¹ CT IV 33Oe.

## d. The Meaning of jw

**4.80** The meaning of jw is difficult to define. It denotes roughly the opposite of "once upon a time." jw relates a statement to the moment of speaking and the world of the speaker, as opposed to the more distant world of a story, of a fairy-tale, or of historical facts. jw indicates that the statement is relevant to the speaker. It is, however, better left untranslated. More will be said about the meaning of jw when verbs are discussed in Part 2 (see also pp. lxviii-lxxi).

## 8. The Existential Sentence ("There Is")

**4.81** Existential sentences express relative existence, that is, existence relative to some circumstance, as in "there is a god" and "there is beer." "There" vaguely refers to a circumstance.

**4.82** As opposed to relative existence, absolute existence has no relation to time or place. Examples are "God exists," "we exist," or "the world exists." The discussion of absolute existence is not part of daily parlance. It belongs to the technical language of religion and philosophy. It is not clear how (or even whether) it was expressed in earlier Egyptian.

#### **OUESTIONS**

1. What is the concept of the adverbial sentence? 2. What is the pattern of the adverbial sentence? 3. By which pronouns are the particles jw and mk followed? 4. How can the particle mk be conjugated? 5. What is the meaning of mk? 6. What is the meaning of mk? 7. To which sentence pattern does mk? 6. What is the meaning of mk? 7. To which sentence pattern does mk? 8. How do relative existence and absolute existence differ?

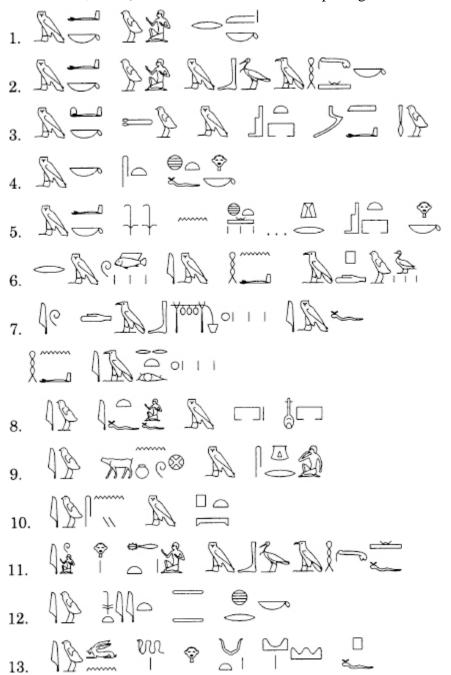
¹ Westc. 6,26. Square brackets mark lost signs that are restored by modern editors.

#### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN

"I am here," "you (masc.) are here," "you (fem.) are here," and so on, using both mk and jw and adding "it is here" for mk (9 and 8 sentences respectively).

#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

The vocabulary is listed on pp. 320-28. Be careful to identify the core members of each sentence. At the end of 8, the determinative  $\lceil \cdot \rceil$  determines two words as a unit. **10** contains a dual pronoun ("the two of them, both"). **12** features an abbreviated spelling of t3 "land."



*Sources:* 1. Sh.S. 108. 2. Sin. B263. 3. JEA 20, 158 (Louvre E6134,19). 4. Siut I 272. 5. Siut I 269. 6. Sh.S. 50-51. 7. Sin. B81-82. 8. Ram. IX 3,6. 9. Sin. R8. 10. CT V 387d. 11. After Sh.S. 67-68. 12. Chap. Ses. 26,29. 13. CT II 377c.

## TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. My father is in the house. 2. He is in his house. 3. He is there. 4. It is he. 5. It is my father. 6. It is my father's house. 7. He is with my mother. 8. The house is beautiful. 9. It is spacious. 10. They are good people. 11. How good they are! 12. Here I am (Look, me). 13. I am his son. 14. There is bread. 15. There is bread there. 16. There is bread here.

## LESSON 20 (§§ 4.83–108)

## II. THREE MODIFICATIONS TO SENTENCES: ASK, DENY, NUANCE

**4.83** So far, in section I (§§ 4.1–82), the four non-verbal sentence types have been described. Sentences express complete thoughts. An example of a sentence is "It will rain." In what follows, three things that one can do to just about any complete thought, also to verbal sentences, are described.

First, one can turn a complete thought into a *question*. One can say, "Will it rain?" or "When will it rain?" Second, one can *negate* a complete thought. One can say, "It will not rain." Third, one can add a *nuance* to a thought by adding a particle. One can say, "But it will rain" or "Maybe it will rain."

## 1. Questions

## a. Specification and Corroboration

- **4.84** There are two types of questions: questions for *specification* and questions for *corroboration*. Questions for specification always involve isolating contrast (for isolating contrast, see §§ 4.26–33).
- **4.85** The purpose of questions for *specification* is to specify certain *entities*, as in "Who said it will rain?", or certain *circumstances*, as in "When will it rain?" To ask for entities, one uses *interrogative pronouns*, such as "who?", "what?", and "which?" To ask for circumstances, one uses *interrogative adverbs*, such as "where?" and "when?"
- **4.86** The purpose of questions for corroboration is to *confirm* or *deny* a thought. An example is "Will it rain?" Questions for corroboration are typically answered by either "yes" or "no." They are therefore also called "yes-or-no" questions. But answers such as "maybe" and "certainly" are also possible.

## b. Questions for Specification Asking for Entities

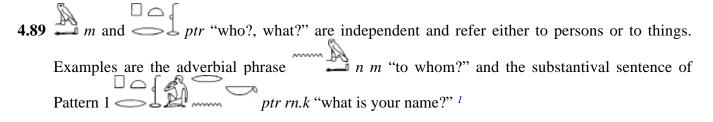
**4.87** Questions for specification require interrogative pronouns. Five common interrogative pronouns are as follows.

**4.88** Interrogative pronouns are either *independent* or *dependent*. They are independent when they are not subordinated to substantives. English examples are "who?" in "Who did it?" and "what?" in

¹ Less frequent in, but common after, Middle Egyptian.

"What did he do?" They are *dependent* when they are subordinated to substantives. An example is "which?" in "Which town did he visit?" Furthermore, Middle Egyptian interrogative pronouns refer either to *persons or things* ("who?", "what?") or to *things only* ("what?").

## **Independent and Referring to Persons or Things**



¹ BD 125 Budge 1898, 263,1.

4.90 When m is preceded by the particle m at the beginning of a sentence, it can be written m and m instead of m instead of m in fact, m and m and m instead of m as the normal form of this specific interrogative pronoun also elsewhere in the sentence.

## **Independent and Referring to Things Only**

## **Dependent and Referring to Persons or Things**

**4.92** Sij "which?" is often dependent, referring either to a person or to a thing. If sij precedes the substantive to which it is subordinated, as in the adverbial phrase sij " sij" sij" sij" sij " sij" sij" sij" sij " sij" sij" sij" sij" sij" sij" sij" sij " sij" sij

¹ CT II 383c.

**4.93** Occasionally, sij is independent, as in the following substantival sentence of Pattern 3.



 $sjj \ pw \ mjw \ pw \ ^C3$  who is that great cat? (who is it  $[sjj \ pw]$ , that [pw] great cat?)

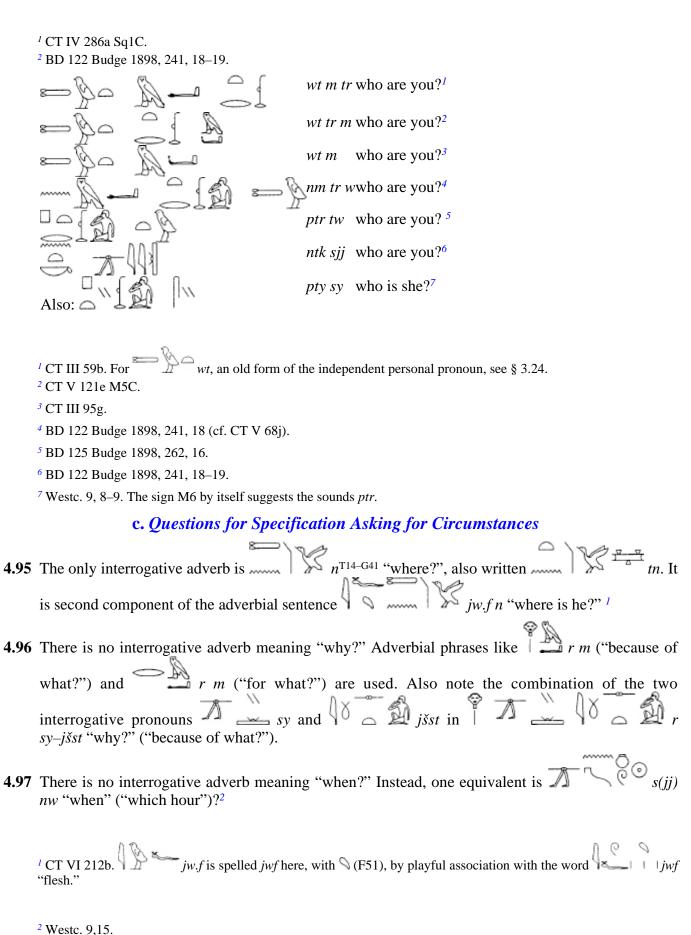
It also is in the following substantival sentence of Pattern 1.

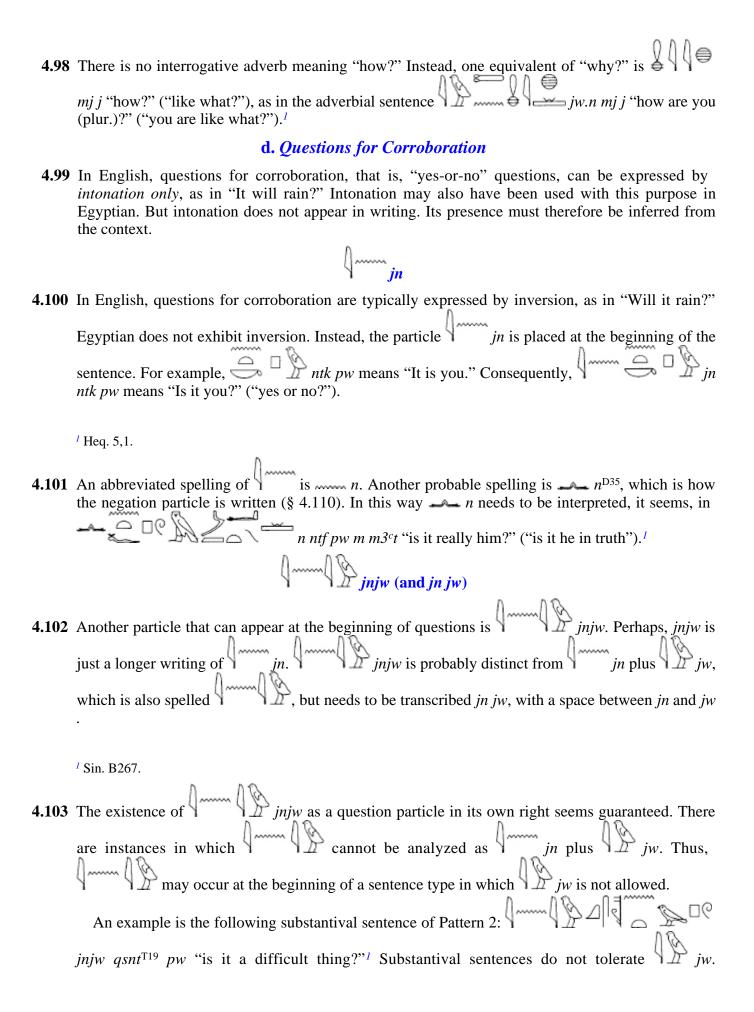
ntk sjj who are you?

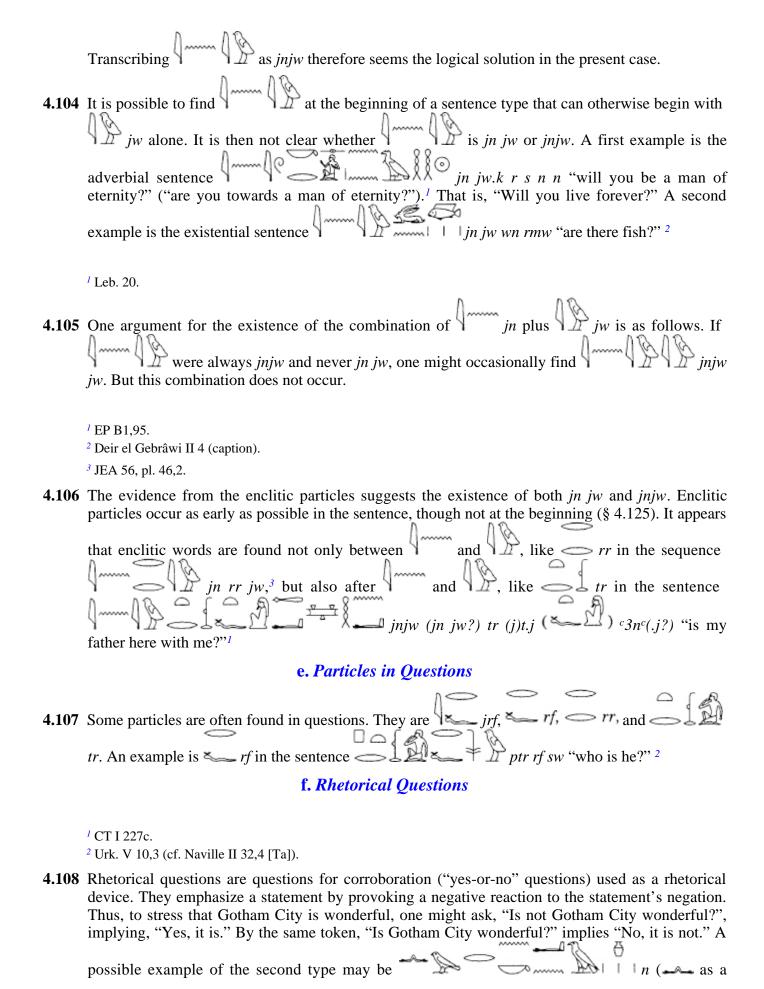
#### "Who Are You?"

**4.94** Different ways of saying "who are you?" are attested. Most contain the particle tr, which is better left untranslated. When the personal pronoun comes first, the *independent* personal

pronoun is used. Otherwise, the *dependent* personal pronoun is used.







writing for jn? [see § 4.101])  $wr \, n.k \, ^c ntj w^{G4}$  "do you have a lot of myrrh?" ("is myrrh great to you?"). If this is indeed a rhetorical question, then the implication is, "You do not."

#### **QUESTIONS**

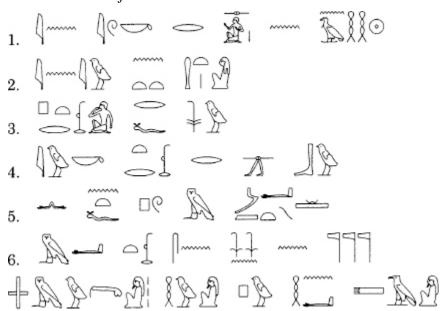
1. How are questions for specification expressed? 2. By which two criteria can interrogative pronouns be classified? 3. How does Middle Egyptian for "where?" differ from Middle Egyptian for "why?", "when?", and "how?" 4. In which two ways are questions for corroboration expressed? 5. In which two ways can *jnjw* be analyzed? 6. What is a rhetorical question?

### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN

1. "Who am I?", "who are you (masc.)?", "who are you (fem.)?", and so on. 2. "Where am I?", "where are you (masc.)?", "where are you (fem.)?", and so on. 3. "Am I in heaven?", "are you (masc.) in heaven?", "are you (fem.) in heaven?", and so on.

¹ Sh.S. 150.

## TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH



**Sources:** 1. EP B1,95. 2. Mutter und Kind 2,8. 3. Urk. V 10,3 (cf. Naville II 32,4 [Ta]). 4. CT VII 457k. 5. Sin. B267. 6. Urk. V 30,8–9; cf. CT IV 228/29c–230/31a.

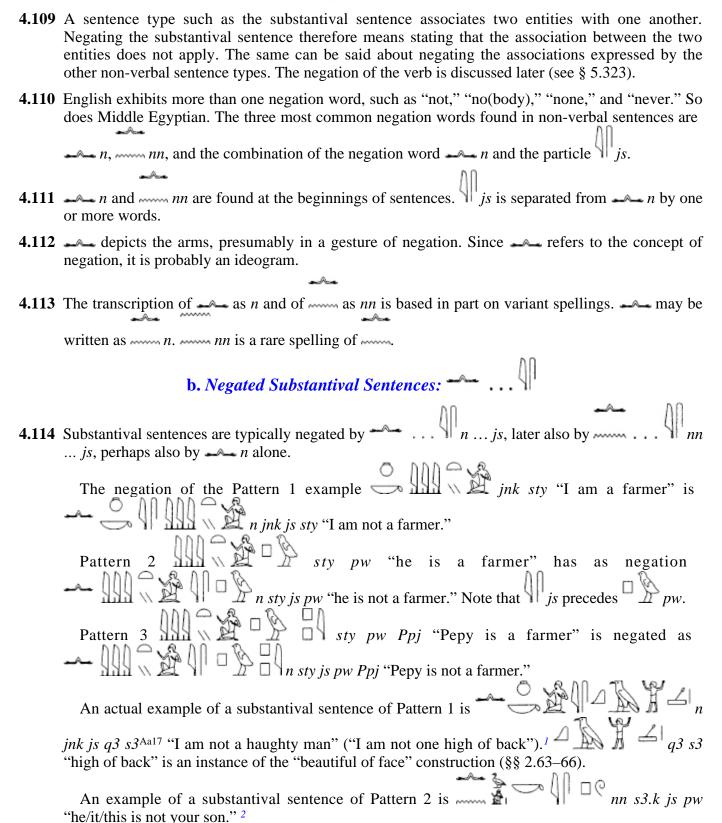
#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. Who are you? 2. I am your lord. 3. What is your name? 4. My name is Ppj. 5. Where are you? (Use jw.) 6. I am in the palace (mw "palace"). 7. Are you a prince? 8. Yes. 9. How are you?

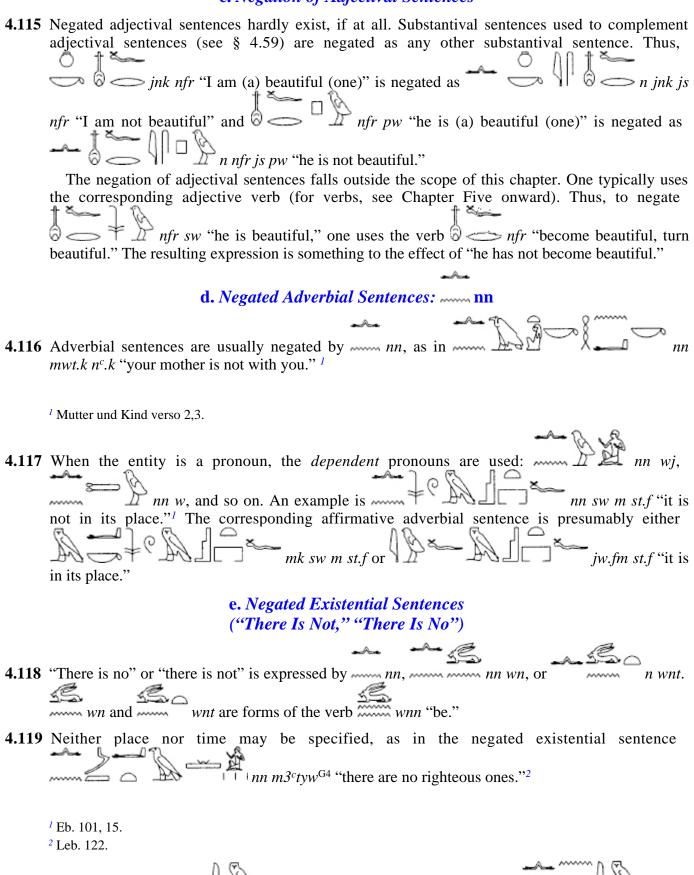
## LESSON 21 (§§ 4.109-34)

## 2. Negation

## a. Negation Words



## c. Negation of Adjectival Sentences



**4.120** The place is specified as if if if if it is in the two examples in the two examples if it is in the two examples if it is in the two examples is in the two examples.



**4.121** The entity itself may be left unspecified. and its equivalents then correspond to "there is none" or "there isn't any," as in nn wn r-w.f "there is none beside him" ("there is not beside him").⁴

## 3. Particles and Interjections

#### a. Particles

**4.122** Particles are a loosely defined group of words. English equivalents of particles are "but," "however," "if," "indeed," "so," and "then." Unlike other word types, particles are never indispensable to express a complete thought. Instead, they are typically added as a nuance to a thought that is already complete.

By contrast, other word types tend to contract relationships with one another in order to together make up a complete thought. Thus, verbs have substantives as direct objects ("eat bread"), adjectives are subordinated to substantives ("nice day"), and so on. Particles typically do not partake in this fabric of interdependency. They are generally added to a thought that already forms a whole without them.

## **b.** Non-enclitic Particles

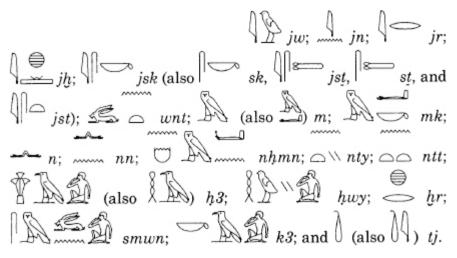
**4.124** Non-enclitic particles appear at the *beginning* of a sentence or of a clause. A list is as follows:

¹ Eb. 69,3.

² Urk. IV 973,11.

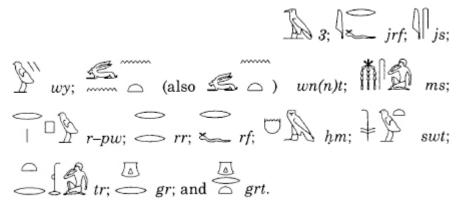
³ BH I 8, A,6 (U1 is reversed).

⁴ BH I 26,155.



#### c. Enclitic Particles

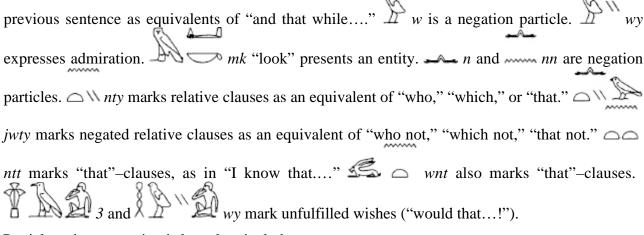
- **4.125** Unlike non-enclitic particles, enclitic particles do not appear at the beginning of sentences or clauses. They appear as a rule in second position. But then, in quite a few cases, enclitic particles follow two or more words, appearing in third or fourth position. One assumes that, in such cases, the words preceding the enclitic particle form a unit with a single accent. The particle does therefore in fact appear in second position. "Enclitic" is Greek for "leaning on." The image is that enclitic words need the support of a previous word in the sense that enclitic words presumably form a group with a single accent together with one or more preceding words.
- **4.126** A list of enclitic particles is as follows:



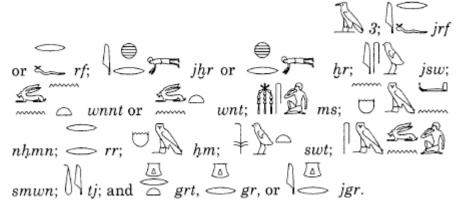
**4.127** Particles may also be combined. There are rules as to which comes first. An example is  $js \ grt$ , which combines non-enclitic  $js \ and \ enclitic \ grt$ .

## d. On the Meaning of Particles

- **4.128** The meanings of particles are of many various sorts. They are discussed in different locations in this grammar.
- 4.129 The meaning of some particles can be established with some degree of accuracy. Thus, jw marks statements made from the point of view of the speaker. jn introduces questions for corroboration. jr means "if" (in conditional clauses). j heads wishes. j heads wishes. j heads wishes. j heads wishes. j heads wishes.



**4.130** Particles whose meaning is less clear include:



**4.131** A number of notions in modern languages have no obvious equivalent in Middle Egyptian. They include "after all," "also," "certainly," "consequently," "even," "furthermore," "in fact," "maybe," "probably," "still," and "surely." In grammars and dictionaries, several of these notions are assigned with different degrees of plausibility to Egyptian particles for which no apparent meaning can be established. One advantage of these provisional equivalents is that it is possible to indicate in English translation that the Egyptian text has an extra word. But English equivalents of particles listed in Egyptian dictionaries should not lead one to believe that we know with certainty what the particles in question mean.

e. "Yes" and "No"

4.132 An equivalent of "yes" is tjw. An equivalent of "no" is ...... nn.

## f. Interjections

4.133 Interjections are words whose meaning is purely emotional. They make the heart beat faster, as it were. An English example is "oh!" Like particles, interjections add a nuance to a thought that is already complete. Two common interjections appearing at the beginning of sentences are already and and and an analysis and an analysis and an analysis and an analysis are the beginning of both is something like English "oh!"

**4.134** If is used to address people, as in  $j^c nw$  "O living ones!" (words placed in the mouth of the deceased in a tomb inscription and addressed to visitors).

## **QUESTIONS**

1. What does the hieroglyph — probably represent? 2. How is the substantival sentence negated? 3. How is the adjectival sentence negated? 4. How is the adverbial sentence negated? 5. How is the existential sentence negated? 6. How do particles differ from other word types? 7. Which are the two types of particles? 8. Which image does the term "enclitic" convey? 9. What is an interjection?

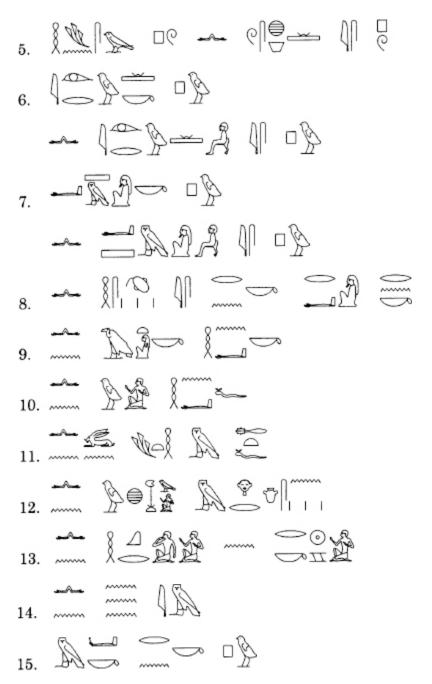
## TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN

1. "I am not his son / daughter," "you (masc.) are not his / her son," "you (fem.) are not his daughter," and so on. 2. "I am not in my place," "you (masc.) are not in your place," "you (fem.) are not in your place," and so on.

## TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

The vocabulary is listed on pp. 320–28. Be careful to identify the sentence types and their core components. In 6 and 7,  $\frac{1}{2}$  is a writing for the first person singular suffix pronoun j.





*Sources:* 1. CT VI 3381. 2. Sh.S. 131. 3. Eb. 101,15. 4. BD 42 Budge 1898, 113,4. 5. EP R45. 6. CT VI 332k-1. 7. CT VI 332m-n. 8. CT V 30b-c. 9. Mutter und Kind verso 2,3. 10. CT I 242d. 11. BH I 7, right-hand vertical column, line 3. 12. Sh.S. 100–101. 13. Urk. VII 16,7. 14. Eb. 69,3. 15. CT VI 235a B1L.

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. I am your son / daughter. 2. I am not your son / daughter. 3. S/he is my son / daughter. 4. He is not my son / daughter. 5. It is him / her. 6. It is not him / her. 7. I am here. 8. I am not here. 9. My son / My daughter is here. 10. My son / my daughter is not here. 11. His / her name is *Mmj / Mmjjt*. 12. His / her name is not *Mmj / Mmjjt*. 13. There is water. 14. There is no water. 15. There is water here. 16. There is no water here. 17. Their water is here. 18. Their water is not here.

## LESSON 22 (§§ 4.135-97)

## III. SENTENCE TYPES IN COMPLEMENTARY DISTRIBUTION

**4.135** So far, in section I (§§ 4.1–82), four sentence types have been defined: the substantival sentence, the adjectival sentence, the adverbial sentence, and the existential sentence.

In section II (§§ 4.83–134), three things that can be done to any of these four sentence types are described. One can turn sentences into a question (§§ 4.84–108). One can negate them (§§ 4.109–21). And one can add particles to them (§§ 4.122–34). There is some overlap between these three things done to sentences because negation words and some question words are classified as particles.

**4.136** The present section III (§§ 4.137–218) deals with three cases in which sentence types help each other out, so to speak, to express a single concept. The sentence types are said to be in *complementary distribution*. That is, they *complement* each other in all referring to the same concept. At the same time, they are *distributed* over different cases of that same concept. The three cases in question are as follows.

```
expressing a possessive relationship
as in "mine is the gold" (§§ 4.137–97)
associating two entities with one another
as in "he is a king" (§§ 4.198–206)
associating a circumstance and an entity with one another
as in "there is a cat in the house" (§§ 4.207–18)
```

# 1. Substantival, Adjectival, Adverbial, and Existential Sentences in Complementary Distribution: To Express Possessive Relationships

## a. Possessive Relationships

- **4.137** Possessive relationships are relationships between two entities, a possessor and a possession. Possessive relationships can be expressed on two levels, on the level of the *phrase* and on the level of the *sentence*. Take a possessor "my sister" and a possession "the house." There are two ways of expressing the relation between possessor and possession. On the level of the phrase, one can say "my sister's house." On the level of the sentence, one can say "My sister owns the house."
- **4.138** The possessor can be a personal pronoun ("I," "you," and so on) or any other word or string of words referring to an entity. The possession can be a personal pronoun or any other word or string of words referring to an entity. There are therefore four possibilities. The examples are from the phrase level.

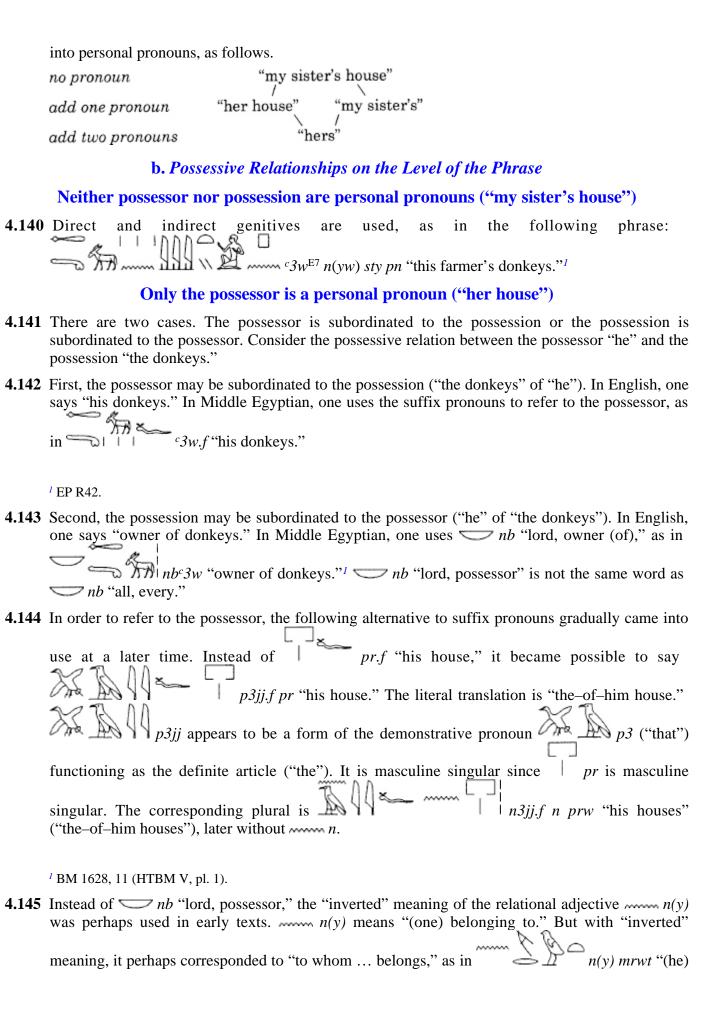
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Neither possessor nor possession are personal pronouns, as in "my sister's house."

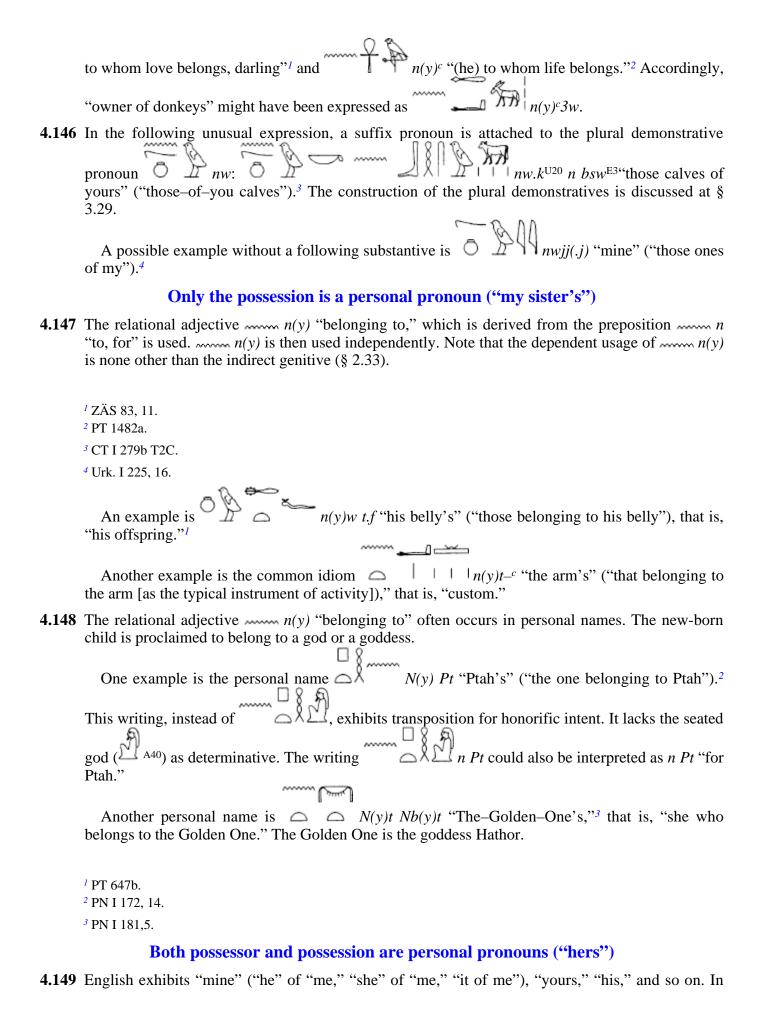
Only the possessor is a personal pronoun, as in "her house."

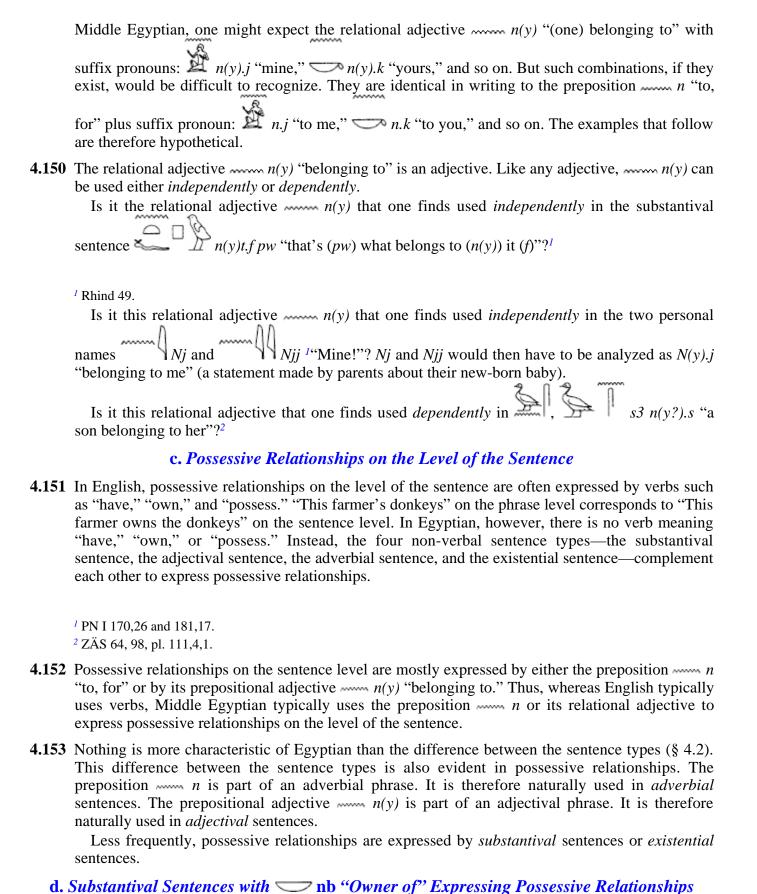
Only the possession is a personal pronoun, as in "my sister's."

Both possessor and possession are personal pronouns, as in "hers."
```

**4.139** The relation between these four possibilities can be viewed as progressively turning both entities







4.154 — *nb* "lord, owner" (§ 4.143) can function as one of the two entities that are associated with one another in substantival sentences, as in the example — *jnk nbc3w* "I owned donkeys" ("I was an owner of donkeys").¹

¹ BM 1628, 10–11 (HTBM V, pl. 1). The past tense ("was") is inferred from the context.

## e. Adjectival Sentences with ...... n(y) "Belonging to" Expressing Possessive Relationships

- **4.155** In adjectival sentences, a property and an <u>entity</u> are associated with one another. Adjectival sentences expressing possessive relationships are no exception. The <u>entity</u> is the *possession*. The property is the prepositional adjective n(y) "belonging to." The entity depending from the preposition inside the prepositional adjective n(y) is the *possessor*.
- **4.156** The adjectival sentence of the is in first position. Second, it is invariable, presumably because it refers to a property only. Third, dependent pronouns ( wj, wj, w, and so on) are used when the entity is a personal pronoun.
- **4.157** Adjectival sentences headed by the adjective n(y) exhibit the same features. First, the adjective n(y) appears in first position. Second, n(y) is invariable, presumably because it refers to a property only. Third, dependent personal pronouns are used when the entity is a personal pronoun.

# Neither possessor nor possession are personal pronouns ("the house is my sister's") (§§ 4.158–60)

**4.158** This case occurs almost exclusively in personal names containing the name of a god.

A first example is N(y) Pt nh "life is Ptah's" ("life belongs to Ptah)." The literal translation is "belonging to Ptah (is) life."

A second example is N(y) nr  $\underline{m3^ct}$  "justice is the god's." The literal translation is "belonging to the god (is) justice."

Hyphens may be used to indicate that these sentences are names: N(y)-Pt-cn "Life-is-Ptah's" and N(y)-nr-m3ct "Justice-is-the-god's."

4.159 The name of the god may be written first as an instance of transposition for honorific intent. Two

examples are the two personal names N(y)-Pt-cn "Life-is-Ptah's" and  $N(y)-R^c-m3^ct$  "Justice-is-Re's." These two names are written as if they were to be read as Pt-n-cn and  $R^c-n-m3^ct$ .

It is generally agreed that these two names exhibit transposition for honorific intent. But alternative transcriptions have been proposed, namely N(y)– cn –Pt and N(y)– $m3^ct$ –R. c  No less than three different interpretations have been suggested for the transcription N(y)–m3ct–R. c : first, as an adjectival sentence, N(y)– $m3^ct$ –R. c  "Re belongs to justice"; second, as an adjectival sentence with "inverted use" of the prepositional adjective, N(y)– $m3^ct$ –R. c  "justice belongs to Re" ("to whom justice belongs is Re"); and third, as an adjectival phrase N(y)– $m3^ct$ –N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–N(y)0–

¹ PN I 223,11.

² Gîza III 143.

³ PN I 171.11.

⁴ Prenomen of Amemembat III.

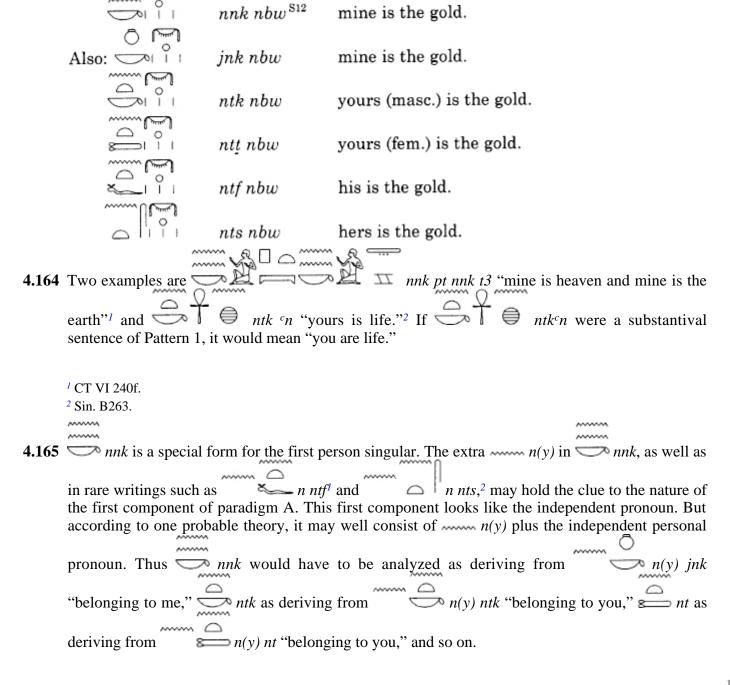
**4.160** When neither the possessor nor the possession is a personal pronoun, it is also possible to use an adverbial sentence instead of an adjectival sentence (§ 4.187). What is the difference in meaning? Perhaps, isolating contrast affects the possessor in the adjectival sentence, as in "Life–is–*Ptah's*" (implying: "and not someone else's").

## Only the possessor is a personal pronoun ("the house is hers") (§§ 4.161–74)

- **4.161** There are two basic paradigms, called here paradigm A and paradigm B. In both paradigms, isolating contrast affects the personal pronoun as possessor. The meaning is therefore "the house is *hers*" (and not someone else's), rather than "she owns the house."
- **4.162** In both paradigm A and paradigm B, the personal pronoun as possessor comes *first*. In paradigm A, the forms of the personal pronoun are very nearly those of the *independent* pronouns. In paradigm B, the forms of the personal pronouns are those of the *suffix* pronouns.

#### PARADIGM A (SINGULAR ONLY)

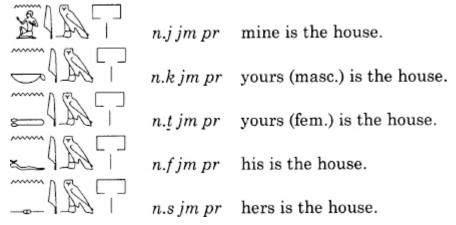
#### 4.163



If this theory is correct, then paradigm A would be an adjectival sentence. Its adjective would be the prepositional adjective m(y). An example such as could be analyzed as ny ntk nbw "belonging to you is the gold."

#### PARADIGM B (SINGULAR ONLY)

#### 4.166



The first component of paradigm B, n.j jm, and so on, is often transcribed with a hyphen: n.j-jm, and so on.

**4.167** According to one possible interpretation, the component (n,j-jm) (n,j-jm) and so on, consists of three elements.

The first element, n, would be the prepositional adjective n(y), expressing a possessive relationship.

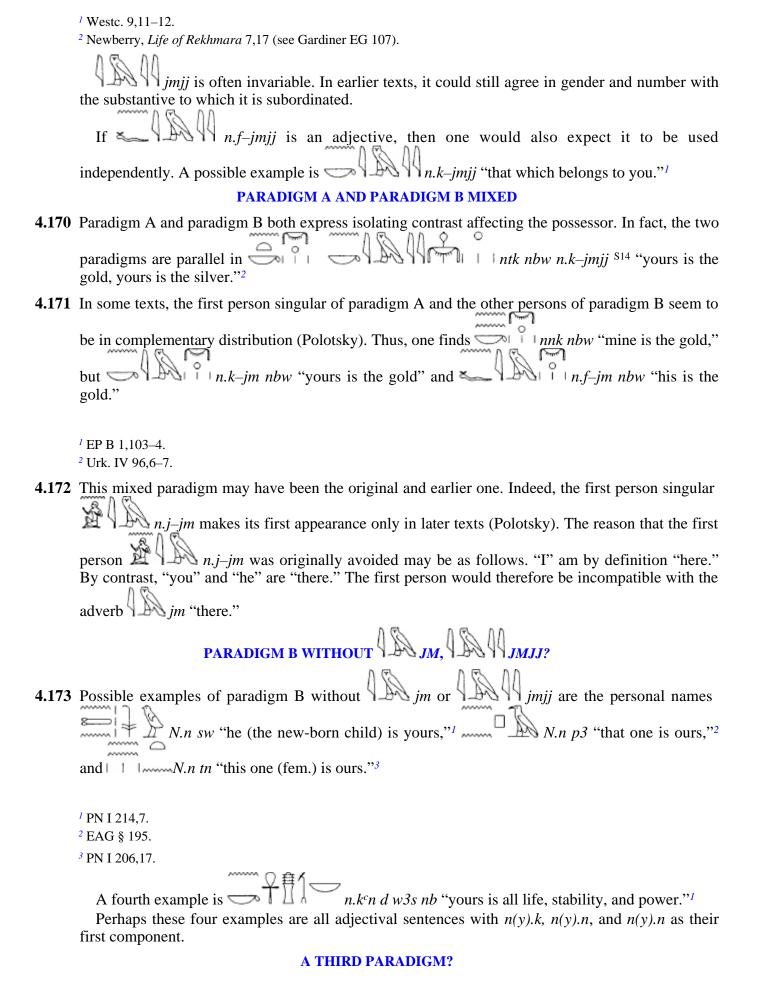
The second element, a suffix pronoun, would be the object of the preposition that is part of the prepositional adjective.

The third element would be the adverb meaning *jm* "there."

- **4.168** According to this analysis, paradigm B is an adjectival sentence. The literal meaning of  $n(y).s-jm \ \underline{pr}$  "hers is the house" is then "belonging to her there is the house." The adjective n(y) "belonging to" is presumably invariable because it refers to a property only.
- adjective. A variant writing such as an adjective. Indeed, "n.f-jmjj seems to indicate that "n.f-jmjj can follow a substantive like any adjective. Examples are "smsw^{A19} n.sn-jmjj "a skipper belonging to him (the king)."²

¹ CT V 279c B2Be.

² CT III 367c B3C.



**4.174** A problematic example is n(y) wj t.j, which seems to mean "my body belongs to me." But if it is interpreted as an example of the common paradigm described in § 4.177, it ought to mean "I belong to my body" ("belonging to my body am I"). An explanation for the position of the dependent pronoun n(y) is suggested in § 4.176.

Is it possible that the prepositional adjective n(y) has "inverted" meaning in this instance?

rather than "belonging to my body am I." n(y) wj t.j would then literally mean "to whom my body belongs am I,"

# Only the possession is a personal pronoun ("it belongs to my sister") (§§ 4.175–81)

**4.175** In adjectival sentences expressing possessive relationships with the adjective n(y), the possessor belongs with the preposition inside the prepositional adjective n(y). One therefore expects the possessor to always *precede* the possession. An example is

Possessor  $\nearrow$  Pt "Ptah" precedes the possession  $\nearrow$  "life."

**4.176** But there is a case in which possessor *follows* possession: when the possession is a personal pronoun and the possessor is not. The possession is then denoted by a dependent personal pronoun. Dependent pronouns are *enclitic*. They occur earlier in the sentence than their non-enclitic counterparts.

**4.177** Thus, one says  $n(y) \underset{\underline{w}\underline{i}}{\underline{w}\underline{i}} R^{C}$  "I belong to Re" ("belonging am  $\underline{I}$  to Re")," and not,  $n(y) R^{C} \underset{\underline{w}\underline{i}}{\underline{w}\underline{i}}$  ("belonging to Re am  $\underline{I}$ "). An example in which n(y) may have "inverted" meaning was discussed above in § 4.174.

¹ Eb. 1, 7–8.

**4.178** A paradigm of the singular forms is as follows.

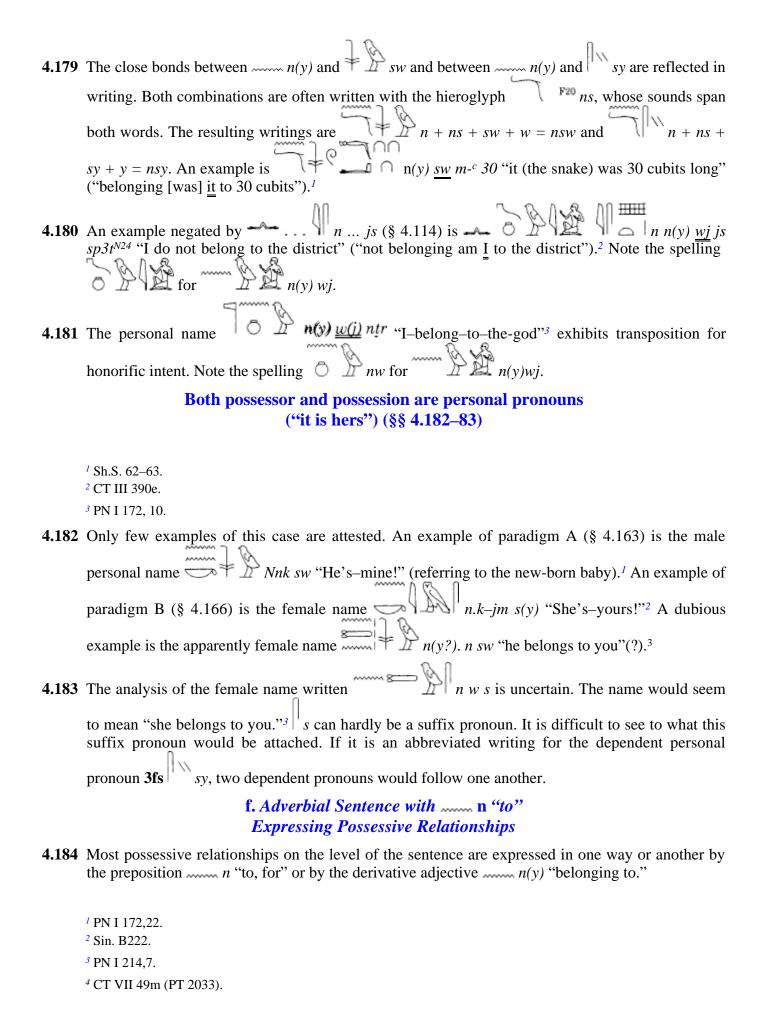
~~~ \( \Phi \) \( \Phi	$n(y) \underline{wj} R^c$	I belong to Re.
	$n(y) \underline{\underline{w}} R^c$	you (masc.) belong to Re.
	$n(y) \underline{n} R^c$	you (fem.) belong to Re.
T DOA	$n(y)\underline{\underline{sw}^{I}}R^{c}$	he belongs to Re.
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	$n(y)\underline{sy}^2R^c$	she belongs to Re.
1 23		

Written as if nsw (see § 4.179).

¹ Chap. Ses. 32, 12.

² CT VI 204b.

² Written as if nsy (see § 4.179).



The adjective n(y) naturally belongs in the adjectival sentence. Adjectival sentences expressing possessive relationships have been described above.

The preposition n naturally belongs in the adverbial sentence. Adverbial sentences expressing possessive relationships are described below.

- **4.185** In adverbial sentences, a circumstance and an entity are associated with one another. In adverbial sentences expressing possessive relationships, the circumstance consists of n "to" plus the *possessor* and the entity is the *possession*. Thus, the Middle Egyptian equivalent of English "I own the horse" is "the horse is to me."
- **4.186** The possessor and the possession can both be either a personal pronoun or any other reference to an entity. This naturally produces four cases, listed below. In three of these four cases, the possession *precedes* the possessor. The possession *follows* the possessor (see § 4.188) when the possessor is a personal pronoun and the possession is not. When the possessor is a personal pronoun, it is

expressed by a suffix pronoun attached to the preposition n "to" (n.j" "to me," n.k "to you," and so on). n "to" plus suffix pronoun is enclitic (§§ 4.225–26). It therefore precedes a possession that it is not a personal pronoun.

#### Neither possessor nor possession are personal pronouns

**4.187** An example is An example is  $\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} \int_{-\infty}$ 

#### Only the possessor is a personal pronoun

**4.188** An example is  $\iiint_{\infty} \frac{1}{n} \int_{\infty} \int_{\infty}^{\infty} \int_$ 

# Only the possession is a personal pronoun

**4.189** An example is the female name  $\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} Jw.s \ n \ mwt.s$  "She-belongs-tc-her-mother" ("she is to her mother").

# Both possessor and possession are personal pronouns

**4.190** An example is the female name Jw.s n.j "she belongs to me, I have her" ("she is to me").4

**4.191** Adverbial sentences expressing possessive relationships do not typically seem to convey isolating contrast. On the other hand, if isolating contrast is expressed by intonation, any word in any pattern can be affected. It seems characteristic of Egyptian, however, that isolating contrast is more often than in many other languages expressed by special sentence patterns. Such patterns expressing possessive relationships have been described above.

# g. Existential Sentences Expressing Possession ("He Has No")

**4.192** Existential sentences are used to express possessive relationships when the *possession* is *indefinite*,

¹ CT III 89e B3Bo.

² Urk. IV 561,2.

³ PN I 15,7.

⁴ PN I 15,4.

as in "he has no children." In Egyptian, one says something like "there is not his children" (or children" ("there is not his children")¹ **4.193** Negated instances ("he has no children") are more common than affirmative ones ("he has a child" or "he has children"). ¹ EP B2, 100. 4.194 The possessor is attached to the possession as a direct or indirect genitive phrase. One finds the of a man"), that is, "everyone is heartless."² 4.195 Accordingly, when the possessor is a personal pronoun, the suffix pronoun is used, as in Two other examples are the two personal names Nn-jt.f "He-has-no-father" ("there is not his father)"⁴ and …… Nn–rn.f"He–has–no–name" ("there is not his name").⁵ ¹ Sin. B84-85. ² Leb. 121. ³ Ram. C verso II, 10 (plate 30). ⁴ PN II 299,26. ⁵ PN I 204,25. h. Survey of Possessive Relationships (Selective) 4.196 ON THE PHRASE LEVEL Neither possessor nor possession are personal pronouns pr snt.j my sister's house (§ 2.34) (§ 2.33) (§ 2.33) (§ 2.34)pr n snt.j my sister's house Only the possessor is a personal pronoun Possession subordinated (§ 4.143) *nbt pr* owner of the house

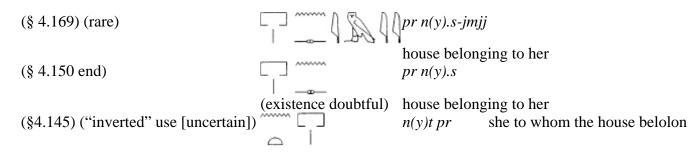
Possessor subordinated

her house

her house

(§ 3.10)

(§ 4.144) (late)



## Only the possession is a personal pronoun

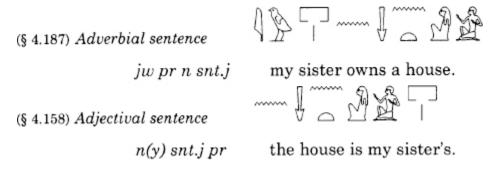


#### Both possessor and possession are personal pronouns

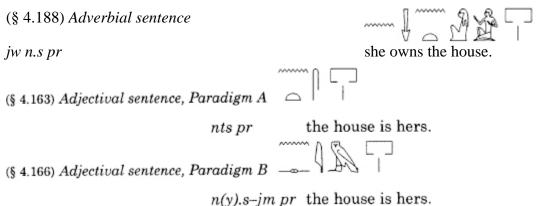


#### 4.197 ON THE SENTENCE LEVEL

## Neither possessor nor possession are personal pronouns



# Only the possessor is a personal pronoun



# Only the possession is a personal pronoun

(§ 4.189) Adverbial sentence  $jw.f \ n \ snt.j$  my sister owns it.

(§ 4.178) Adjectival sentence  $n(y) \ sw \ snt.j$  it is my sister's.

# Both possessor and possession are personal pronouns

(§ 4.190) Adverbial sentence  $jw.f\ n.s$  she owns it.

(§ 4.182) Adjectival sentence, Paradigm A  $nnk\ sw$  it is mine.

(§ 4.182) Adjectival sentence, Paradigm B  $n(y).s-jm\ sw$  it is hers.

#### **QUESTIONS**

1. What is a possessive relationship? 2. On which two levels are possessive relationships expressed? 3. How do "the farmer's donkeys," "his donkeys," "the farmer's," and "his" relate to one another? 4. What is the relation between "his donkeys" and "owner of the donkeys"? 5. How can  $nw.k \ n \ bsw$  be analyzed? 6. Which pivotal element most commonly expresses possessive relationships on the sentence level? 7. How can  $N(y)-nr-m3^ct$  and  $nfr \ sy$  be analyzed as the same sentence pattern? 8. How can  $N(y)-nr-m3^ct$  and and  $n(y) \ wjR^c$  be analyzed as one sentence pattern? 9. Which four interpretations exist for  $n(y) \ wjR^c$  be analyzed as one sentence pattern? 9. Which four interpretations exist for  $n(y) \ wj \ t.j$  and  $n(y) \ wj \ t.j$  and  $n(y) \ wj \ R^c$  exhibit the same pattern while differing in meaning?

#### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN

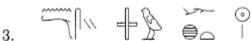
1. "This is my house," "this is your house," and so on. 2. "I am the owner of this house," "you are the owner of this house," and so on. 3. "I own a / the house," "you own a / the house," and so on (two paradigms). 4 "Mine is the house," "yours is the house," and so on (two paradigms). 5. "I belong to the god," "you belong to the god," and so on. 6. "I have no house," "you have no house," and so on.

#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

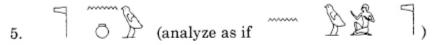
The vocabulary is listed on pp. 320–28. Identify sentence types and core components. **4** and **5** exhibit transposition for honorific intent. For **5**, consult § 4.181. For **6**, consult § 4.182. For **7**, consult § 4.183. In **10** (perhaps also in **7**), s may be an abbreviation of the dependent pronoun

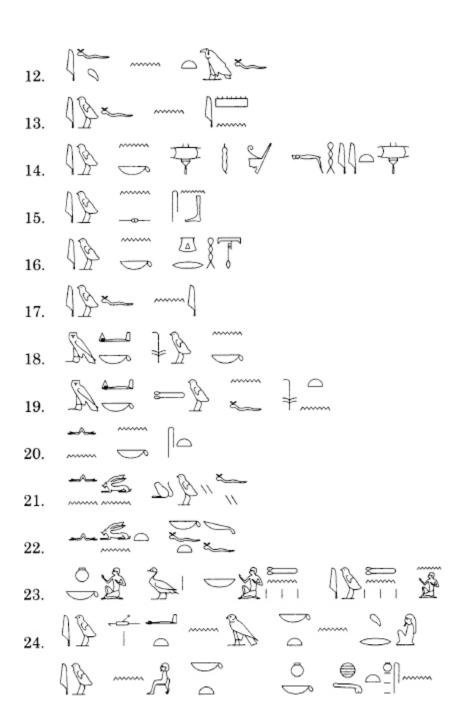
sj. In 12, jwf "meat" is a playful spelling for jw.f (particle with suffix pronoun). In 14, n(y) is spelled jw.f. In 17, the first person singular suffix pronoun jw.f is spelled jw.f. In 19, the last word addresses a person ("O...!"). 18, 19, and 20 have two enclitic words; note the word order. In 24, the first person singular suffix pronoun jw.f is spelled jw.f. In 25, jw.f determines the entire genitive phrase, which exhibits transposition. In B of 25, jw.f is a variant of jw.f in 25, pointed brackets mark text added by modern editors. 26 is not only a possessive relationship and a question, but also a future transient association ("will X be Y to you?", "will you have X as Y?", "will X serve as Y to you?"), anticipating § 4.206 below.



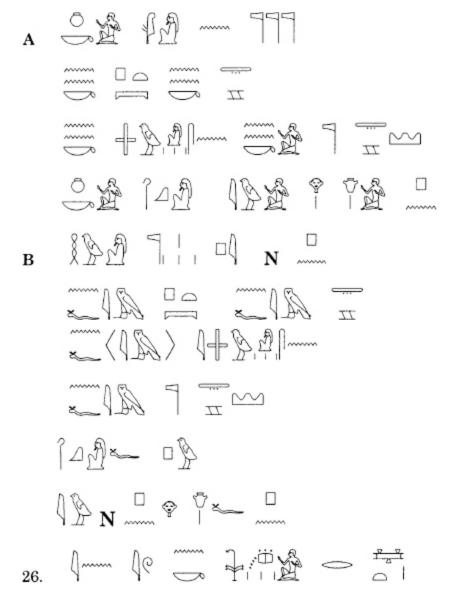








25. Part of a Coffin Text Spell in two versions A and B, from two coffins at the Museum of Fine Arts in Boston.



Sources: 1. BH I 8, A,2. 2. CT II 294b. 3. DB IV 109. 4. Louvre C1,3. 5. PN I 172,10. 6. PN I 214,8. 7. CT VII 49m. 8. Harhotep 562. 9. Sin. B263. 10. Sin. B222–23. 11. PN I 15,7. 12. PN I 14,15. 13. PN I 14, 13. 14. Abydos II 23 no. 5,5. 15. PN I 13,25. 16. CT I 254f. 17. PN I 14,7. 18. CT VI 370d. 19. CT VI 369p. 20. EP B1,292. 21. Leb. 130. 22. Sm. 7,8. 23. BD 47 Budge 1898, 121,6–7. 24. CT III 89e-f B1L. 25. CT VI 155b-g B2Bo and B1Bo. 26. EP B1,5.

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. My father's house. 2. His house. 3. My father's. 4. His. 5. My father has a house. 6. He has a house. 7. My father owns it (it belongs to my father). 8. He owns it. 9. It is *his*. 10. My brother has no house. 11. He has no house.

# LESSON 23 (§§ 4.198–231)

# 2. Substantival and Adverbial Sentences in Complementary Distribution: To Associate Entities

#### a. Permanent and Transient Associations

- **4.198** The English sentences "he is my son" and "he is a child" associate two entities with one another. The two sentences exhibit the same pattern. Yet, there is a difference between the two. I am always somebody's son. But one ceases to be a child when growing up. The association between "he" and "my son" in the first sentence may therefore be called *permanent*. By contrast, the association between "he" and "a child" in the second sentence is *transient*. Kinship relations are typically permanent. Age and profession are typically transient.
- **4.199** In English, a permanent association of entities and a transitory association of entities tend to be referred to in the same way. In Middle Egyptian, however, the two types of association are denoted by different sentence patterns. *Permanent* associations are expressed by *substantival* sentences. *Transient* associations are expressed by *adverbial* sentences.

#### b. Permanent Association: Substantival Sentence

**4.200** An example of a permanent association is s3.j pw "he's / it's / that's my son." The entity s3.j "my son" is permanently associated with the entity pw "he, it, that."

# c. Transient Association: Adverbial Sentence

**4.201** Adverbial sentences associate an entity and a circumstance with one another. Circumstances typically change. They are therefore in a sense always transient. A car may be "in the garage." But "in the garage" easily changes to "in the street."

¹ Berl. ÄI I 258,8 (Berl. 1157,18).

- 4.202 Adverbial sentences are also used to associate two entities with one another in a transient association. Instead of "he is a child," one says, "he is in ( m) a child." An example is the adverbial sentence mk tw m mnjw^{A47} "(look,) you are a shepherd" ("[look,] you are in a shepherd"). Another example is jw.f m nnw "he is a baby" ("he is in a baby").
- **4.203** The preposition m is not translated. The Middle Egyptian distinction between permanent association and transient association is therefore lost in English translation.
- **4.204** m "in" also expresses transient associations outside the adverbial sentence. In English, one says "to become somebody or something." In Egyptian, one says pr "become" m ("in")

## d. The Same Association Either Permanent or Transient

**4.205** Some associations can be presented either as permanent or as transient. An example is the association between "he" and "king." When the association is permanent, one uses the substantival sentence, as in ** *nsw*A45* pw "he is king." When the association is transient, one uses the adverbial sentence, as in ** *jw.f m nsw* "he is king." In this second example, the crown prince has just become king upon his father's death.

## e. Future Transient Associations: Adverbial Sentence with r "toward"

**4.206** The preposition r "to(ward)" is used instead of m "in" to refer to future transient associations. In a present transient association, one states that one entity is in another entity. In a future transient association, one states that one entity is toward another entity, as in f(m) = f(m) = f(m) f(m) = f

# 3. Adverbial and Existential Sentences in Complementary Distribution: To Associate Entities and Circumstances

## a. Indefinite Entities and Definite Entities

**4.207** Indefinite entities do not refer to any entity in specific. Thus, "a cat," "any cat," and "cats" do not refer to any cat or cats in specific. Definite entities do refer to specific entities. Thus, in case of "the cat," "those cats," "his cats," "she," and "they," we do have a specific cat or specific cats in mind.

# b. Associating Indefinite and Definite Entities with Circumstances

- **4.208** When a circumstance and an entity are associated with one another in English, there is a difference between a definite entity and an indefinite entity. Consider the association between the circumstance "in the house" and the entity "cat." When "cat" is indefinite, as in "a cat," "there's" ("there is") is normally required, as in "There's a cat in the house." One does not normally say, "A cat is in the house." But when "cat" is definite, as in "the cat," "there's" is out of place. One says, "The cat is in the house," not "There's the cat in the house."
- **4.209** "There's" states the existence or availability of somebody or something. One derives the

¹ EP B1,177.

² Urk. VII 49,14.

³ Urk. IV 17, 16.

¹ Sin. B68. Though here rather "while he was king" ("he being king"). Subordinate  $\iiint jw$  will be discussed in Chapter Nine of Part 2.

² Sin. B280.

impression that a circumstance ("in the house") and an indefinite entity ("a cat") cannot be associated with one another unless one has stated before that the indefinite entity does indeed exist ("there's a cat").

#### c. Inconsistency in Middle Egyptian

- **4.210** The different treatment of indefinite entities also applies in Middle Egyptian, but not with the same consistency as in English. This may have something to do with the fact that indefinite entities and definite entities are not always clearly distinguished in Middle Egyptian. Thus, Middle Egyptian has no definite or indefinite articles. 

  **sn can mean either "a brother" or "the brother."
- **4.211** In later Egyptian, however, the difference between indefinite entities and definite entities became more explicit. Accordingly, the expression of "there's" when indefinite entities and circumstances are associated with one another (see § 4.208) gradually became as consistent as it is in English.
- **4.212** The inconsistent treatment of indefinite entities in Middle Egyptian appears from a comparison of the following two examples.

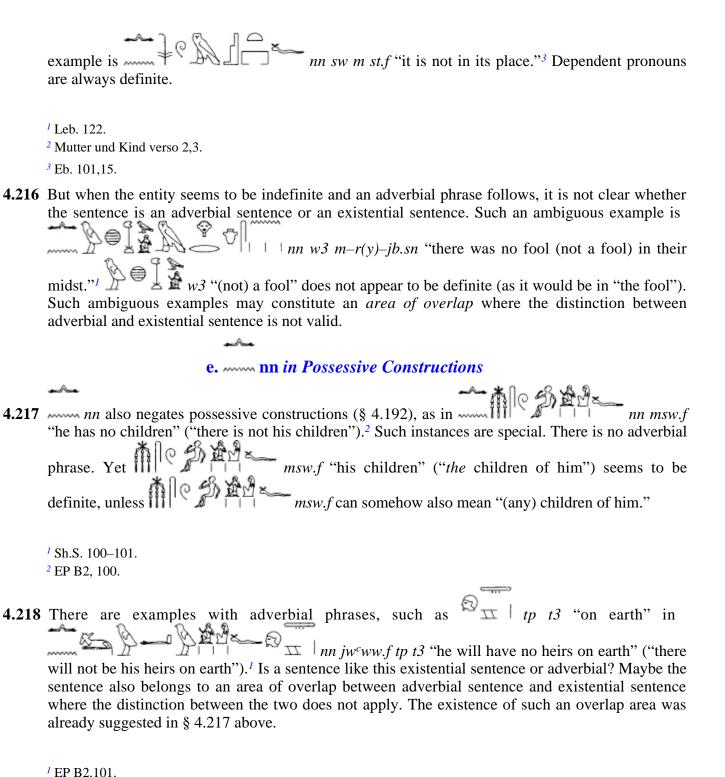
## d. ..... nn: Adverbial or Existential Sentence?

4.213 mn has been mentioned above as negation of two sentence patterns. First, it serves as negation of the existential sentence, just like mn wn "there's no" (§ 4.118). Second, it serves as negation of the adverbial sentence (§ 4.116).

- 4.214 When no adverbial phrase follows the entity, *nn* clearly serves as the negation of an *existential* sentence, as in the existential sentence *nn m3^ctyw*^{G4} "there are no righteous ones."
- **4.215** When the entity is definite and an adverbial phrase follows, nn begins an adverbial sentence. This is because existential sentences as a rule state the existence of indefinite entities. An example is  $nn \ mwt.k \ n^c.k$  "your mother is not with you." The suffix pronoun k "you" makes mwt "mother" definite. One refers to a specific mother. Another

¹ BH I 7, right-hand vertical right column, line 3.

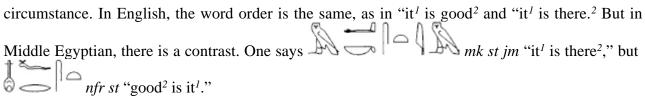
² Sin. B81–82.



#### IV. WORD ORDER

#### 1. Four Clusters of Rules

**4.219** Word order is very strict in Middle Egyptian, as it is in most languages. For example, in adjectival sentences, the entity *follows* the property. But in adverbial sentences, the entity *precedes* the



- **4.220** The order of words can be formulated in rules. These rules come in clusters. Four interrelated clusters can be distinguished. They pertain to (1) non-verbal sentence types, (2) verb forms, (3) satellites of verb forms, and (4) enclitic words.
- **4.221** Cluster one (1) pertains to the order of the components in the four *non-verbal sentence types:* the substantival sentence, the adjectival sentence, the adverbial sentence, and the existential sentence. These rules have been formulated above in Chapter Four (see §§ 4.12–13, 4.57, 4.70–71, and 4.81). Cluster two (2) pertains to the order of the *components of verb forms*. These rules will be formulated in Chapter Five (§§ 5.276–311). Cluster three (3) pertains to the three *satellites* of verb forms. These rules will be formulated in Chapter Six in Part 2. Cluster four (4) pertains to *enclitic words*. These rules have already been formulated in part above (§ 4.14). More will be said about them in Chapter Six in Part 2. The rest of this section is also devoted to the position of enclitic words.
- **4.222** Enclitic words are the free agents of word order. Their position obeys rules that are independent from the other three clusters of rules pertaining to word order. But this does not mean that the rules describing the position of enclitic words are not strict.

#### 2. Enclitic Words

#### a. Properties of Enclitic Words

**4.223** Enclitic words occur as early as possible in the sentence. They presumably form a unit with a single stress together with one or more preceding words. They cannot appear at the beginning of a sentence. This is how they behave in known living languages. And so they must have in Middle Egyptian.

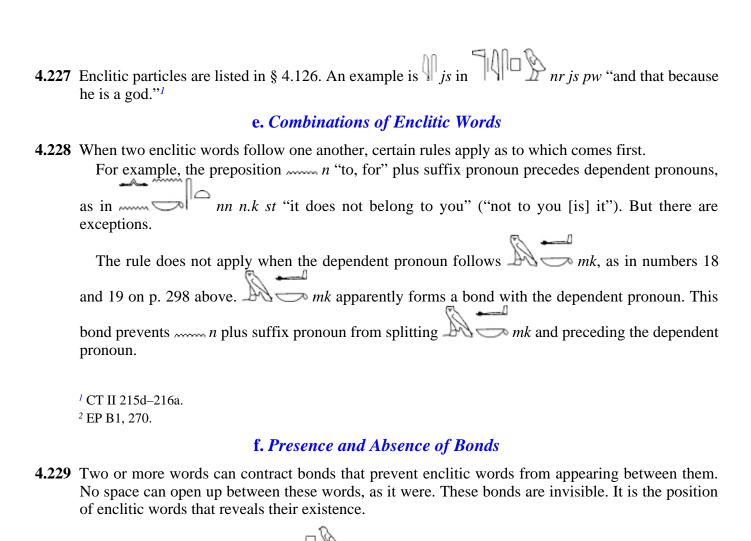
#### **b.** Enclitic Pronouns and Enclitic Particles

**4.224** A distinction is necessary between enclitic pronouns and enclitic particles. There are two differences between the two. First, enclitic pronouns have non-enclitic counterparts. Enclitic particles do not. Second, enclitic particles always occupy *second* position in the sentence. Enclitic pronouns may occur later in the sentence.

#### c. Enclitic Pronouns

- **4.225** Enclitic pronouns appear earlier in the sentence than their non-enclitic counterparts. Thus, in English "to my father" and "to him" are non-enclitic. "Him" is an enclitic counterpart. Accordingly, non-enclitic "to my father" and non-enclitic "to him" *follow* "the book" in "I gave the book *to my father*" and "I gave the book *to him*." But enclitic "him" precedes "the book" in "I gave *him* the book."
- **4.226** There are three types of enclitic pronouns. The first type is the preposition m "to, for" plus suffix pronoun (m, "for me," m, "for you," and so on). The second type is the dependent pronoun (m)" "I, me," m0" m0" "you," and so on). The third type is m0 m0 m0 in substantival sentences.

#### d. Enclitic Particles



4.230 Thus, from the position of enclitic pw in substantival sentences of Pattern 2, it appears that a bond exists between the two components of the direct genitive. An example is mwjjt r pw "it is the moisture of the mouth." But no such bond exists in the indirect genitive. An example is qsw^{T19}pw nw q3bt.f "they are the bones of his chest." The contrast between presence of a bond in the direct genitive and absence of a bond in the indirect genitive is seen clearly in the following two variants of Egyptian for "It's the horizon of my father Atum":



¹ Eb. 99,17–18.

4.231 Between substantive and adjective, there may or may not be a bond. Thus, there is none in

² Sm. 14,21.

³ CT IV 208b TIC^b.

⁴ CT IV 209b BHlBr. R8 is probably a determinative, rather than an ideogram for *nr* "god."

The probably form a unit, as in $\frac{1}{2}$ $$
probably form a unit, as in $\sqrt{\frac{1}{2}} \sqrt{\frac{1}{2}} \sqrt{\frac{1}}} \sqrt{\frac{1}{2}} \sqrt{\frac{1}{2}} \sqrt{\frac{1}{2}} \sqrt{\frac{1}{2}} \sqrt{\frac{1}{2}} \frac{1$
"he is the great bull." In this case, determines the substantive and the adjective together. That confirms that the two form a unit.
There is a bond between prepositional adjectives and substantives. An example is
ry $stt^{Aa2}$ pw "he has a swelling" ("he is one who is under a swelling")
There is no bond between a substantive and the word $s$ "self, own," which is followed by a suffix pronoun that refers to the substantive, as in $Tm \ pw \ s.f$ "in the substantive of
a suffix pronoun that refers to the substantive, as in The pw s.f "is Atum himself."

#### **QUESTIONS**

1. How does a permanent association between two entities differ from a transient one? 2. How is a permanent association expressed? 3. How is a transient association expressed? 4. How do  $jw.fm\ nsw\ differ$ ? 5. How are future transient associations expressed? 6. How does associating a circumstance and an indefinite entity with one another differ from associating a circumstance and a definite entity with one another? 7.

How does this difference affect the interpretation of _____ as a negation of adverbial and existential sentences? 8. Which are the four types of enclitic words? 9. What is noteworthy about the order of

words in ...... nn n.k st? 10. How do enclitic words reveal bonds between words?

#### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN

1. "I am a scribe," "you (masc.) are a scribe," "he is a scribe", and so on (6 sentences, omitting second and third feminine singular). 2. "I am her son / daughter," "you are her son," "you are her daughter," "he is her son," "she is her daughter," and so on (8 sentences).

#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

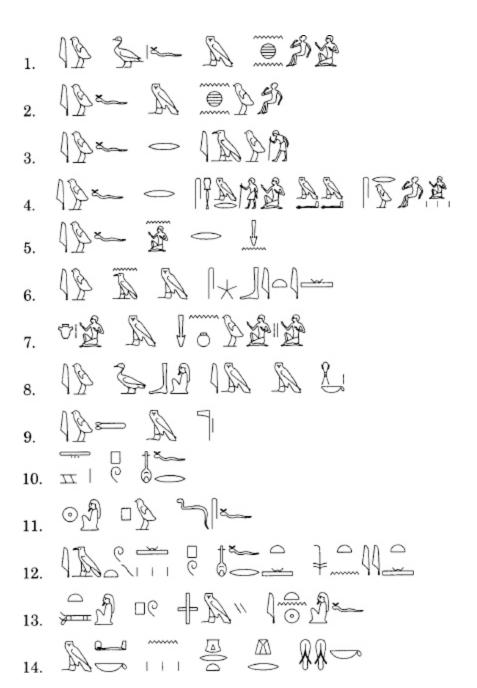
The vocabulary is listed on pp. 320–28. 5 expresses at the same time a *possessive* relationship and a *future transient* association of entities ("will have someone as ...").

¹ Sin. B81.

² BD 17 Naville II 67,89 (Cb).

³ Berl. 3038, 15,11.

⁴ BH I 25,75–76.



*Sources:* 1. Adm. 16,1. 2. Urk. VII 49,14. 3. Urk. VII 54,4. 4. Sin. B280–81. 5. PN I 14,11. 6. Urk. IV 1090,3. 7. Sh.S. 42. 8. CT I 248d. 9. CT I 55b. 10. Sin. B81. 11. CT IV 287b. 12. Merikare Len. 10,11. 13. BD 17 Budge 1898, 51,16–52,1. 14. Urk. IV 948,12.

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

1. I am good. 2. I am your son / daughter. 3. I am a scribe. 4. You (sing.) are good. 5. You are my son / daughter. 6. You are a scribe. 7. He is good. 8. He is my son. 9. He is a scribe. 10. He will be a scribe. 11. I am Osiris. 12. I am *Osiris*. 13. I am you (in a religious ritual). 14. The house is there. 15. There is a house there. 16. The house is not there. 17. There is no house there. 18. The beautiful house. 19. My father's house. 20. It is a house. 21. It is a beautiful house. 22. It is my father's house. 23. It is my father's beautiful house.

VOCABULARY FOR EGYPTIAN TO ENGLISH TRANSCRIPTION EXERCISES IN CHAPTER FOUR (PP. 210–13, 221–23, 231–33, 247, 261–63, 296–300, 318–19)

Words are listed in "alphabetical" order. This order is as follows:

$$3, j/jj/y,^c, w, b, p, f, m, n, r, h, , , s, š, , k, g, t, , d$$

The feminine singular ending t is disregarded in classifying "alphabetically." Notes (1) to (3) are found on p. 328 end.

#### **Abbreviations**

**ABB** = abbreviated spelling

AD = adjective

ADV = adverb

C = compound

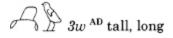
N = name

 $\mathbf{P} = \text{preposition}$ 

 $\mathbf{REL} = \mathbf{relational}$ 

SF = substantive (feminine)

**SM** = substantive (masculine)







dess)

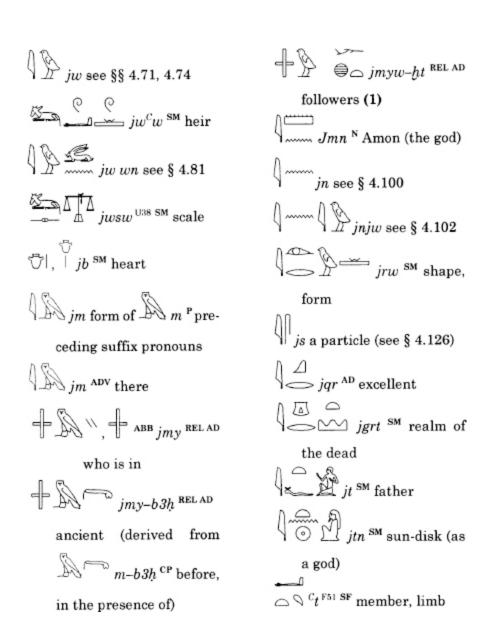


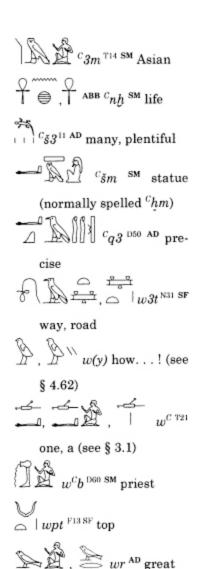
man

office

charm

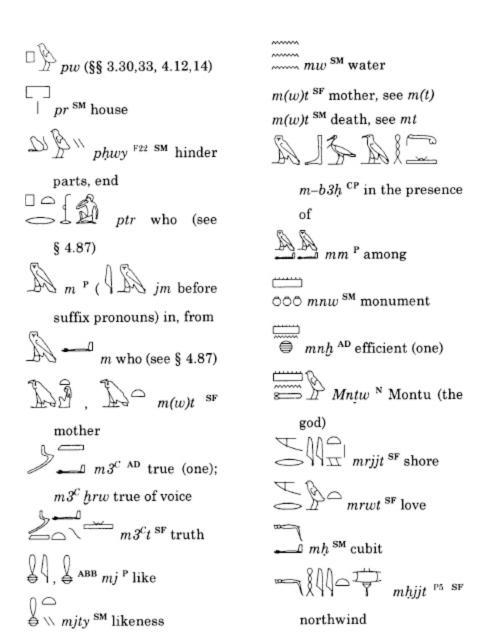
SF grapes

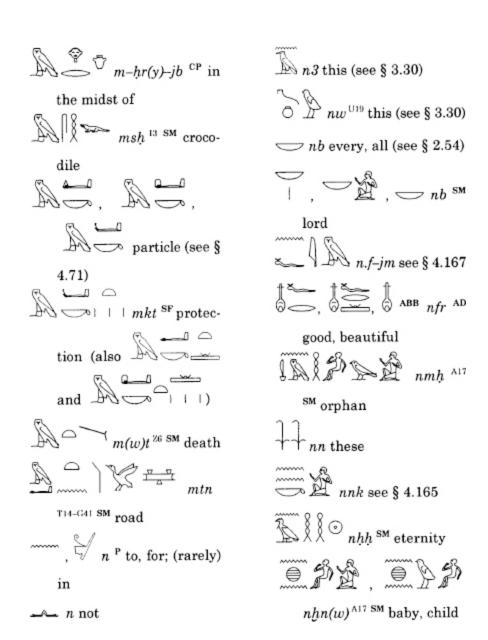


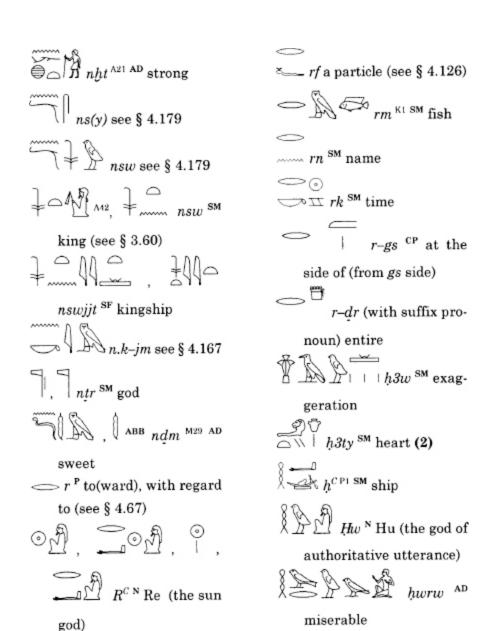




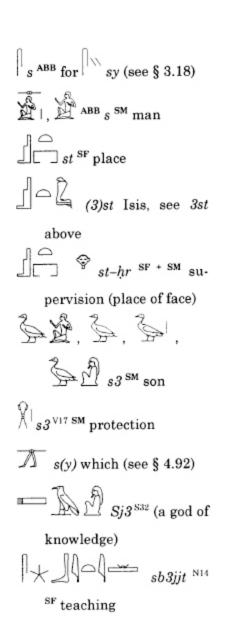
 $\Box \bigvee_{pj} = \Box \bigvee_{pw} pw$ 

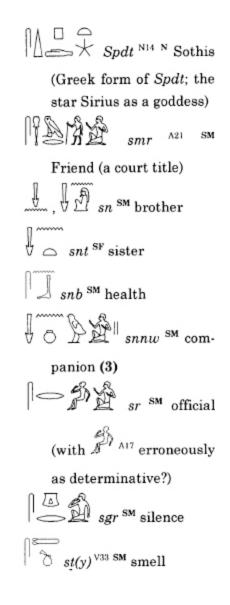


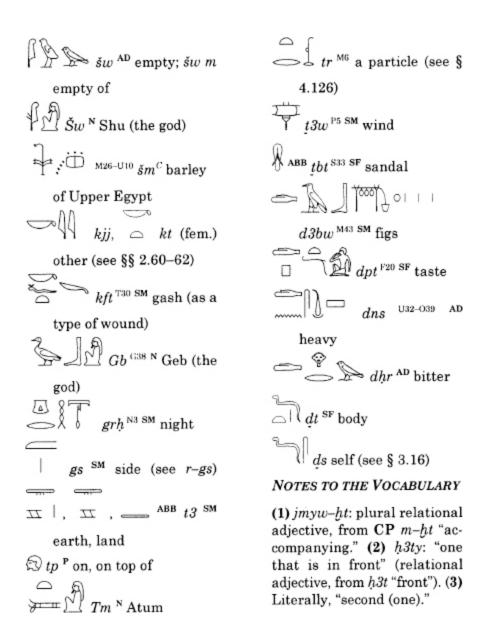












#### NOTES TO THE VOCABULARY

(1) *jmyw–t:* plural relational adjective, from CP *m–t* "accompanying." (2) *3ty:* "one that is in front" (relational adjective, from *3t* "front"). (3) Literally, "second (one)."

# APPENDIX TO CHAPTER FOUR A NOTE ON TERMINOLOGY

What meaning do "substantive," "adjective," and "adverb" retain so long after ancient grammarians created them? Replacing them with terms that more adequately represent the phenomena in question might be desirable. But it is unrealistic to expect that alternative terms might be successful. Anyhow, substantives refer to entities. So why not simply call them "entity words"? With "clause" and "phrase," "entity" would mean "referring to an entity." But with "sentence," it would mean "whose most typical member refers to an entity (see § 4.10). The resulting new terms, with their traditional equivalents, would be as follows.

WORDS

substantive adjective adverb entity word property(-and-entity) word circumstance word

#### PHRASES

substantival phrase adjectival phrase adverbial phrase entity phrase property-and-entity phrase circumstance phrase

#### CLAUSES

substantival clause adjectival clause adverbial clause entity clause property-and-entity clause circumstance clause

#### SENTENCES

substantival sentence adjectival sentence adverbial sentence entity sentence property sentence circumstance sentence

# LESSON 24 (§§ 5.1–38)

# CHAPTER FIVE VERBAL COORDINATES

#### INTRODUCTION

#### 1. The Verb

**5.1** The verb is a word type denoting *change*. Entities, properties, and circumstances together only describe a *static* world. But the world around us is full of change. To express change is the general concept expressed by the *verb*. This includes the opposite of change, wnn "be." It also includes a large number of adjective verbs, such as only of the opposite of change.

#### 2. The Verb Form

- **5.2** If the verb is a word type denoting change, then verb *forms* are words or strings of words denoting *one instance* of change.
- **5.3** An instance of change may also be called a *process*. The opposite of a process is a *state*. When we observe a process, something is happening. There is movement of some kind. When we observe a state, nothing happens. All is at rest.
- **5.4** Every single verb form of Middle Egyptian denotes a process. But there is one special case, the stative conjugation, or just stative. The stative describes a *state resulting from a process*. The stative's concept is therefore double or two-pronged. On the one hand, the stative *describes* a state, that is, an absence of change. On the other hand, the stative also clearly *implies* a previous process, that is, a presence of change.
- 5.5 Thus, the stative of mfr "become good" describes the *state* of "being good" and implies the *process* of "becoming good" that led to that state. The stative of this verb therefore refers to "having become and hence now being good."

Likewise, the stative of m(w)t "die" describes the *state* of "being dead" and implies the *process* of "becoming dead" or "dying." The stative of this verb therefore refers to "having died and hence now being dead."

**5.6** A pure state is expressed by the adjective. It is the absence of the slightest hint of a process that distinguishes the adjective 0 - nfr "good" from all the verb forms of the verb 0 - nfr "become good," even if adjectives may well derive from adjective verbs.

Sometimes the process implied by the stative seems to have faded. The stative then comes close to expressing a pure state like the adjective.

#### 3. Verb Forms and Their Coordinates

5.7 After these definitions of the verb and the verb form, it would be natural to expect a list of the verb forms. What is Middle Egyptian for "I chose," "I have chosen," "I choose," "I am choosing," "I will choose," and so on? The answer to this question is what one expects to find next, and also does find, in any language textbook. However, the description of verb forms will be delayed until

Chapter Six. Instead, this Chapter Five is devoted to the coordinates of verb forms. What are a verb form's coordinates?

- **5.8** A verb form is not a "thing." It is a *cluster* of "things." For example, "has eaten" in "he has eaten" is past—not present or future. It is active—not passive. Furthermore, it has an auxiliary—rather than lacking one. Also, "eat" is transitive—not intransitive. And so on. Each "thing" of the cluster of "things" that defines the verb form "has eaten" is an option from among two or more options. A verb form is fully defined by listing all the options.
- **5.9** These options are to verb forms what coordinates are to points in space. Just as coordinates locate a point in space, options locate a verb form in the verbal system.
- **5.10** Space has *three* dimensions. By contrast, there is more than one way of analyzing and organizing the Middle Egyptian verbal system into dimensions. One requirement is that the analysis covers the entire verbal system. The present analysis has *eight* dimensions.
- **5.11** A point in space has as many coordinates as there are dimensions, namely three. The verbal system has eight dimensions. Accordingly, verb forms in principle have eight coordinates.
  - One exception is the fourth dimension, called components. In it, verb forms have more than one coordinate. This is an effect of the specific organization chosen for Dimension 4 in this grammar. It does not mean that Dimension 4 differs in any fundamental way from the other dimensions.
- **5.12** This Chapter Five details the coordinates in each of the eight dimensions. In other words, the chapter lists everything that verb forms can possibly do. Yet it does not describe the verb forms themselves. Verb forms are clusters of coordinates. These clusters are described from Chapter Six onward.

In a sense, Chapter Five lists all the building blocks found in verb forms. But it only describes what these building blocks look like, not how they combine to make up verb forms. Not every combination of building blocks is possible. The possible combinations, that is, the verb forms, are described from Chapter Six onwards.

5.13	This procedure may seem unusual. However, analyzing Middle Egyptian verb forms is a unique
	problem. A unique problem requires a unique method. The cause of all this is the imperfection of
	hieroglyphic writing. For example, $stp.f$ , which consists of the stem $stp.f$
	hieroglyphic writing. For example, $\square \longrightarrow stp.f$ , which consists of the stem $\square \longrightarrow stp$
	"choose" and the suffix pronoun $-f$ , is a writing of at least eight different verb forms. And this
	is a count of the active verb forms only. The eight English equivalents are "he has chosen," "whom
	he chose," "that he chooses," "whom he chooses," "when he chooses," "that he will choose,"
	"whom he will choose," and "may he choose." Each of these eight verb forms exhibits a different
	\\\C_\rac{\times}{\times}\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
	cluster of coordinates. These eight verb forms are all written stp.f. But they must
	have sounded differently, in great part by exhibiting different vowels.

**5.14** How does one discuss eight verb forms *stp.f, stp.f, stp.f, stp.f, stp.f,* and so on, without seeing any difference between them? Without a firm grasp of the possible coordinates, one is in danger of losing all sense of location or direction. This feeling has probably been experienced by all students of Middle Egyptian at one time or another.

# 4. The Eight Dimensions

- **5.15** The eight dimensions of the Middle Egyptian verbal system are as follows.
  - (1) sound pattern class of root
  - (2) concept class of root
  - (3) inflection
  - (4) components

- (5) negation
- (6) voice
- (7) time
- (8) function
- **5.16** The dimensions can be grouped according to *two main distinctions*. The *first* distinction is between *verb* and *verb form*. Dimension 1 and Dimension 2 pertain to the verb in general. In these two dimensions, sound pattern class and concept class, every verb form of a given verb has the same coordinate. In other words, verbs have these coordinates regardless of any specific verb form. Dimensions 3, 4, 5, 6, 7, and 8 pertain to specific verb forms. The coordinates in these six dimensions are specific to one or more verb forms. The *second* distinction is between *concept* and *sound pattern*. As noted, language is a large set of links between concepts and sound patterns. This basic duality applies to the hieroglyphic script (§§ 1.6–8). It applies to the sentence types (§ 4.4). And it also applies to the dimensions of the verbal system.

Of the eight dimensions, *two* pertain to the *sound pattern* of verbs or verb forms, namely Dimensions 1 and 4, sound pattern class and components. *Five* dimensions belong to the *concept* of verbs or verb forms, namely Dimensions 2 and 5 to 8, that is, concept class, negation, voice, time, and function. *One* dimension pertains to *both sound pattern and concept* of verb forms, namely Dimension 3, that is, inflection.

**5.17** All this may be summed up in the following table.

	SOUND PATTERN	CONCEPT
VERB	1	2
VERB FORM	3, 4	3, 5, 6, 7, 8

**5.18** All we can *see* and *touch* of verb forms is their sound pattern—to the limited extent that the defective hieroglyphic writing represents it. This means that only *three* dimensions appear immediately to our senses. They are Dimensions 1, 3, and 4, that is, sound pattern class, inflection, and components.

The other five dimensions pertain to concepts. These dimensions cannot be directly observed. Many decades of scholarship have provided us with approximate definitions for them.

- **5.19** Language does not consist of many things, but of many *links* between two things. In this sense, there is a direct link between Dimension 4, on the one hand, and Dimensions 5 to 8, on the other hand. Dimension 4 and Dimensions 5 to 8 are like the two sides of a sheet of paper. Dimension 4, components, lists all the tidbits of sound pattern that are linked to tidbits of concept in Dimensions 5 to 8, negation, voice, time, and function, and *vice versa*.
- **5.20** The concept of *number* plays a crucial role in the present analysis. Many sets of coordinates on given levels of the hierarchy can be counted exactly. Knowledge of these numbers contributes to a precise understanding of the verbal system.

# 5. Primary, Intermediate, Final Coordinates

**5.21** Coordinates may be part of a hierarchy. A choice of a coordinate on a higher level may require a further choice between sub-coordinates on a lower level.

*Primary* coordinates are not subordinate to any other coordinates. *Intermediate* coordinates are both subordinate to other coordinates and have coordinates subordinated to them. *Final* coordinates do not have coordinates subordinated to them. Final coordinates are not divisible and have no parts. They are to the verbal system what the point is to mathematics.

#### **6. Relations between Dimensions**

**5.22** This Chapter Five is an attempt to list every single coordinate in every single dimension, that is, the complete building blocks of the verbal system. But one important property of the verbal system will not be listed in full. The coordinates of the different dimensions contract *relations*. These relations are like invisible wires running from certain coordinates in one dimension to certain coordinates in other dimensions.

For example, Dimension 2, concept class, encompasses the coordinates transitive and intransitive. Dimension 6, voice, encompasses the coordinates active and passive. It is clear that the coordinates active and passive in Dimension 6 only apply to the coordinate transitive in Dimension 2. Only transitive verbs exhibit the contrast between active and passive verb forms.

Another example is as follows. Dimension 1, sound pattern class, encompasses different form classes. Dimension 4, components, includes the contrast between non-geminating and geminating verb forms. An important relation between Dimension 1 and Dimension 4 is that only certain form classes exhibit gemination.

**5.23** A complete codification of all the relations between the dimensions would be desirable. But the matter is of such complexity that a survey will not be attempted. Most of these relations will be formulated when the verb forms themselves are described from Chapter Six onwards.

## 7. Referring to Verb Forms

- 5.24 In referring to verb forms, inflection and negation are usually included, that is, the elements "f "he" and n "not" in the verb form n f "he" are found in Dimension 3. The sound pattern and the concept of inflection are found in Dimension 3. The sound pattern of negation is found in Dimension 4, the concept in Dimension 5.
- **5.25** Generic verb forms represent a cluster of coordinates in abstract fashion. They represent all the verb forms with the same coordinates in Dimensions 4 to 8. It is as if, in English, "she is choosing" would represent the coordinates found in "she is eating," "she is speaking," "she is working," and so on.
- 5.26 sm "hear" is the model verb normally used in grammars. But stp "choose" is preferred here. One reason is that the stative conjugation of stp "hear" hardly exists.
- 5.27 Generic verb forms are cited in the third person masculine singular form. Thus, the generic verb form stp.r.f "then he chooses," with affix r, represents the cluster of coordinates found in jr.r.j "then I do," jr.r.k "then you do," jr.r.k "then he sees," m33.r.f "then he sees," rd.r.f "then he gives," and so on. The verbs are jr(y) "do," m33 "see," and rd(y) "give."

# 8. Fact and Inference and the Size of the Verbal System

**5.28** The network of coordinates cannot guarantee the secure identification of every verb form in every text. This is too much to hope for. In fact, it is precisely because verb forms can often not be

identified with certainty that a coordinate system is useful and necessary. The coordinates are designed as a safety net for discussing something that is inherently uncertain and doubtful. It may save one from losing all sense of direction. The coordinates should also facilitate distinguishing between what can be established as fact and what is inferred or interpreted.

5.29 It can often not be established with certainty which coordinates a given verb form in a given text, say stp.f, exhibits. On the other hand, what we know with fair approximation is the number of the possible coordinates from which to choose; they are listed in this Chapter Five. What we also know with fair approximation is the different ways in which the coordinates cluster or combine, that is, the verb forms. In other words, the size of the verbal system is fairly well-known now, even if it has taken many decades of research to reach this status. It is unlikely that much will be added to the current inventory.

But what will always remain to some degree uncertain is the full identity of many verb forms in texts. The simple reason is that hieroglyphic writing does not provide us with the necessary information to identify them definitively. And an inference, however reasonable, is never a fact.

# 9. The Principle of Parallelism

- 5.30 How have grammarians determined in the first place that  $\square$  stp.f can be a writing of at least eight different verb forms? If the difference cannot be seen, it is not a fact and cannot be proven. In other words, the existence of the eight different verb forms must have been plausibly inferred. The main principle of inference is the principle of parallelism. It is a principle that will also be used here.
- **5.31** According to the principle of parallelism, a distinction observed in one class of verbs, or even in just one or a few verbs, may be supposed to exist also in verbs or form classes in which it cannot be observed. Indeed, it seems reasonable to assume that certain basic distinctions are common to all verbs, even if they can only be observed in some.
- 5.32 For example, some verbs have distinct writings for two participles. One of these verbs is m33 "see." Its past active participle is spelled m3 "who has seen." Its present active participle is spelled m33 "who sees." But many other verbs do not have distinct writings for these two forms. An example is d "say."

Does d "say" then not exhibit the distinction between past and present active participles? One might claim that the verb d "say" only has a single active participle written d. Such a claim cannot be refuted because there are no facts to disprove it. But most if not all grammarians assume that, in *spoken* Middle Egyptian, d "say" had distinct forms for the present and past active participles and that the difference, whatever it was, could not be reflected in writing, both participles being spelled d.

5.33 The distinction between m3 "who has seen" and m33 "who sees" is a fact and serves as a source for the principle of parallelism. The distinction between d "who says" and d "who has said" is an *inference* and is therefore a *result* of the same principle.

		2	²		
5.34	The distinction between $d$ "who says" and $d$ "who has said" remains an inference even feveryone accepts it. The large number of inferences lends to the study of Middle Egyptian a type of <i>individuality</i> that is not known from the study of most other languages. Each must follow his or ner own judgment in deciding whether inferred distinctions are acceptable.				
5.35	The result is a roundabo example.	he result is a roundabout way of defining verb forms. Direct definition is often not possible. An			
			A.		
	The verb $^{\triangle}$				
	distinction in writing between a verb form $jw.f$ , with $jw.f$ , without $jw.f$ , without $jw.f$ , without $jw.f$ , without $jw.f$ the verb $jw.f$ does not exhibit this distinction in writing.				
			A		
	Now, according to the principle of parallelism, $d$ "say" presumably also exhibited this distinction, but only in speech, not in writing.				
	In sum, a certain verb	form 🗐 💆	d.f could be defined in a rather roundabout way as "the		
	verb form for which the	other verb	d.f could be defined in a rather roundabout way as "the $jw$ has the written form $jwt.f.$ "		
		10. "Choo	sing" Coordinates		
5.36	Identifying verb forms amounts to making choices between coordinates in eight dimensions. This will be represented as checking off boxes (). Choosing coordinate C of three coordinates A, B, and C may be depicted as follows.				
			□ A		
			$\square$ B		
	⊠ C				
5.37	5.37 As noted earlier, dimensions may exhibit a hierarchy. A choice of one coordinate may require further sub-choices of sub-coordinates. For example, the choice of coordinate B from coordinates A and B may necessitate the further choice of a from sub-coordinates a and b.				
	□ A				
⊠ B					
	$oxed{\mathbb{N}} a$				
			$\Box b$		
5.38	8 Two or more choices may need to be made in the same layer. For example, in Dimension 4, vowels are at the same time either short or long and either stressed or unstressed. Long stressed a required				
	the following choices. $\boxtimes$ vowels $(a, i, u)$	🛚 length	□ short		
			⊠ long		
		🛚 stress	□ unstressed		
			⊠ stressed		
9	QUESTIONS				

1. What is a verb? What is a verb form? 3. What is a process? 4. What is a state? 5. What is the concept of the stative? 6. How does the adjective differ from the stative? 7. What are a verb form's coordinates? 8. Why may it be useful to study the coordinates of verb forms independently from the

verb forms themselves? 9. Which are the eight dimensions of the verbal system? 10. According to which two criteria can the eight dimensions be subdivided and how? 11. Which three dimensions can be observed directly in hieroglyphic texts? 12. What are primary coordinates, intermediate coordinates, and final coordinates? 13. What are relations between dimensions? 14. What is a generic verb form? 15. What is the principle of parallelism?

# LESSON 25 (§§ 5.39-73)

#### I THE FIRST DIMENSION: SOUND PATTERN CLASS OF THE ROOT

#### **Coordinates**

- 1. triliteral verbs
  - 1.1. strong verbs
  - 1.2. third-weak verbs
  - 1.3. second-doubling verbs
  - 2. biliteral verbs
- 3. other sound pattern classes

#### 1. Roots of Verbs, Stems of Verb Forms

- **5.39** In principle, a verb's root is what all the verb forms of a verb have in common.
- **5.40** Like anything in language, the root is two-sided, comprising sound pattern and concept. The verb forms of a verb have certain sounds in common. This is the root sound pattern. The verb forms of a verb also have a concept in common. This is the root concept.
- **5.41** It is generally accepted that a root always consists of consonants only, no vowels. This is because vowels presumably changed from one verb form to another.
- **5.42** An example of a root sound pattern is  $\Box$   $\Longrightarrow$  stp. These three consonants are shared by all the verb forms of the verb that exhibits the root concept "choose."
- **5.43** The roots of many verb forms do not change. The unchangeable root is used as dictionary form. The root consonants of other verbs do exhibit variation. Each variation may be called a stem. Such verbs do not have a single root sound pattern. The root is an abstract concept. One of the stems is used as the dictionary form of the verb.
- **5.44** Each stem is specific to certain verb forms. It can be said that roots are a feature of verbs and stems a feature of verb forms.
- **5.45** In the following four cases, verbs have more than one stem.

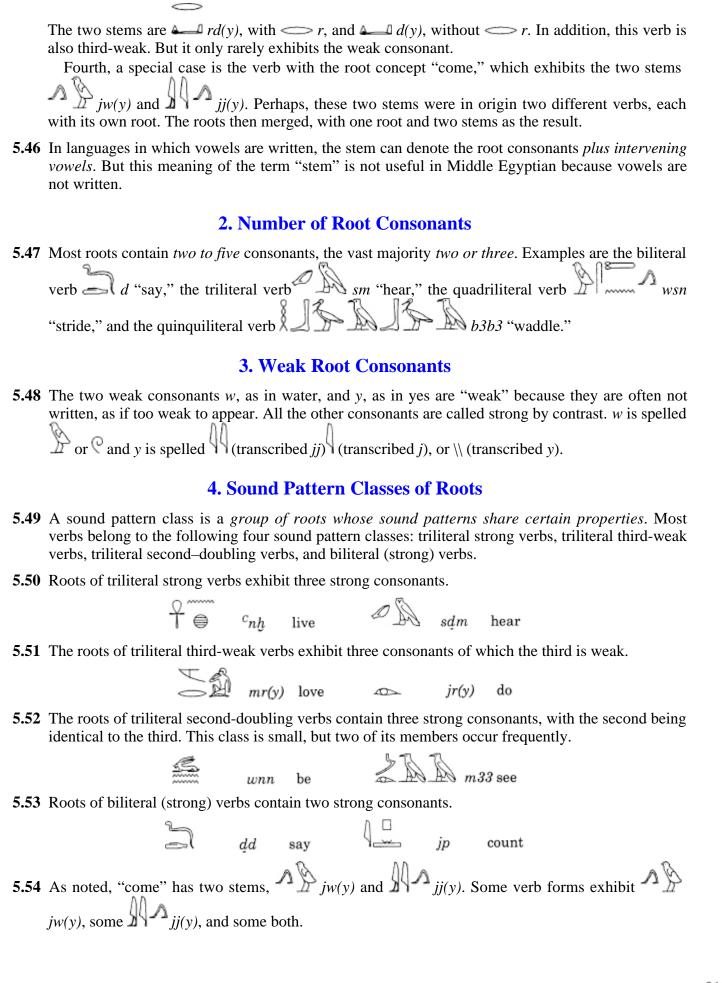
First, the root of last-doubling verbs appears in two variations: double or single appearance of the last consonant. Either variation is a stem. An example is the verb with the root concept "be." It

exhibits the two stems wnn and wnn. This verb does not have a single root sound pattern.

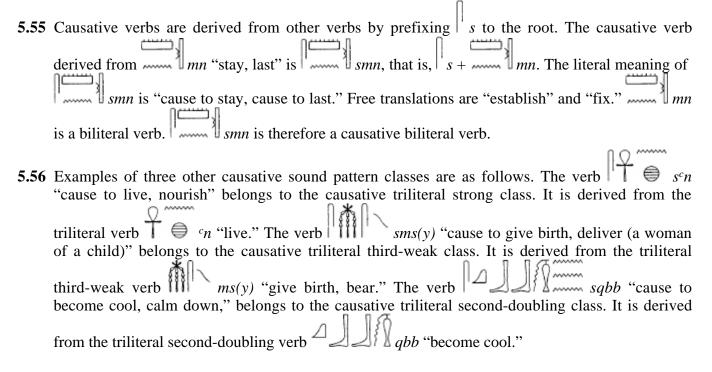
The root is an abstract concept. The longer form wnn is used as the dictionary form, as with all doubling verbs.

Second, in last-weak verbs, the weak consonant y (as in yes) is usually not written. An example is mr(y) "love." But occasionally, one encounters the writing mrjj. mrjj is probably a writing of the weak consonant y. Therefore, mrjj could be treated as one stem and mr as another. In Dimension 4, mrjj will also be classified as a component for practical purposes. It is otherwise not fully understood why mrjj appears in some verbs but in most not. The form without the weak consonant is the dictionary form, in this case mr.

Third, the verb with the root concept "give" exhibits two stems: with r and without r.

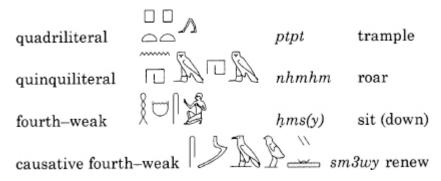


### 5. Causative Sound Pattern Classes



#### 6. Other Sound Pattern Classes

**5.57** There are about fifteen sound pattern classes. Eight are illustrated above. Examples of four more are as follows.



## II THE SECOND DIMENSION: CONCEPT CLASS OF THE ROOT

#### **Coordinates**

- 1. transitive verbs
- 2. intransitive verbs
  - 2.1. verbs of motion
  - 2.2. adjective verbs
  - 2.3. other intransitive verbs

## 1. Concept Class

**5.58** All the verb forms of a given verb share the same root. Like everything in language, the root consists of a sound pattern and a concept. This concept and this sound pattern are inextricably

linked to one another. It is the link between them that makes language what it is. But the two sides of the link need to be described separately. The sound pattern of the root has been described as Dimension 1. The concept linked to this sound pattern is described here as Dimension 2.

A sound pattern class is a group of roots whose sound pattern have certain properties in common. Likewise, a concept class is a group of roots whose concepts have certain properties in common.

## 2. Sound Pattern Classes and Concept Classes

- **5.59** Roots exhibit different sound pattern classes. These classes are described in Dimension 1 above. Two examples are the third-weak class and the second-doubling class. Like the root's sound pattern, the root's concept also exhibits more than one class.
- **5.60** On the whole, there is little direct correspondence between sound pattern classes and concept classes. In other words, specific sound pattern classes are mostly not linked to specific concept classes.

One exception concerns the class of second-doubling verbs. Quite a few second-doubling verbs

are so-called adjective verbs. Examples are wrr "become great," "turn great," "become soft."

#### 3. Transitive Verbs and Intransitive Verbs

### a. Definition

- **5.61** As regards the concept of roots, the most important distinction is between the class of the transitive verbs and the class of the intransitive verbs. The traditional definition of this distinction is as follows. Transitive verbs can take a direct object. Intransitive verbs cannot.
- **5.62** It would be useful, however, to make this definition as empirically secure as possible. For this purpose, it is always better to avoid concept or meaning. Communicating concept or meaning is obviously the ultimate purpose of language. But concepts cannot be directly observed. Only the sound patterns that are attached to the concepts can be.
- **5.63** The following definition of transitive verbs is objective and independent of individual choice. Transitive verbs are those that can in certain active verb forms be followed by a dependent pronoun. Intransitive verbs cannot.

A generic example of one such verb form is found in sw "I choose sw "I choose sw "I choose sw "I choose sw at transitive verb. Intransitive verbs also appear in this verb form. But they cannot be followed by sw or by another dependent pronoun. Every verb that could replace sw in the verb form above, or in verb forms like it, may be defined as a transitive verb.

## b. Comparison of English and Middle Egyptian

- **5.64** Often, a Middle Egyptian transitive verb will be translated by an English transitive verb. The same correspondence applies to intransitive verbs. There is much overlap between Middle Egyptian and English in this respect, as there is between most languages. However, English translation is not always a reliable guide as to whether a Middle Egyptian verb is transitive or intransitive. It is best to consult dictionaries, which list this information.
- **5.65** An example in which Middle Egyptian and English differ is as follows. Consider the English verbs

"fight" and "speak." The verb "fight" is considered transitive in "fight someone" because "someone" is the direct object. But it is intransitive in "fight with someone." The verb "speak" is considered transitive in "speak words" because "words" is the direct object. But the same verb is intransitive in "speak with someone." It appears that the two English verbs "fight" and "speak" are both transitive and intransitive.

By contrast, the Middle Egyptian equivalents,  $\int \int \int dr dr dr$  "speak" and  $\int \int \int dr dr dr$  "fight," are *always intransitive*, at least as far as the surviving evidence allows us to see. Neither  $\int \int dr dr dr dr$  or another dependent pronoun in certain verb forms. Instead, one finds  $\int \int dr dr dr$  "speak to (someone)" and  $\int dr dr$  "with (someone)" and  $\int dr dr$  "with (someone)."

## c. Three Types of Intransitive Verbs

- 5.66 Three main types of intransitive verbs may be distinguished. The first type is verbs of motion, such as m "go." The second type is adjective verbs, such as m "become good." The third type is a residual category, all the other intransitive verbs; an example is m "become ."
- **5.67** There are also transitive verbs of motion such as  $\int \int jn(y)$  "bring (someone or something)." The pairs of legs confirm that these are verbs of motion. However, the term "verbs of motion" is by convention limited to *intransitive* verbs of motion.

## d. Transitive Verbs without Direct Object

- **5.68** Transitive verbs do not always have a direct object. But they are generally still called transitive. Thus, "eat" is transitive in "he is eating the bread." Its direct object is "the bread." But "eat" has no direct object in "I saw him, he was eating." Yet it is still called transitive.
- **5.69** There is a difference between a transitive verb that can appear with or without a direct object, such as "eat," and a verb that is either transitive or intransitive, such as "move." "Move" is transitive in "he is moving the chair" and intransitive in "he is moving (by himself)." What is the difference between transitive "he is eating" and intransitive "he is moving"? Neither has a direct object. The difference lies in the changing role of "he."

In "he is moving the chair," "he" causes something else to move. In "he is moving (by himself)," it is "he" himself that is moving. Because of the changing role of "he," "move" tends to be called transitive in "he is moving the chair" and intransitive in "he is moving (by himself)." In other words, adding a direct object to "he is moving (by himself)" changes the role of "he." Intransitive "he is moving (by himself)" is turned into transitive "he is moving (something)." The role of "he" changes.

In "he is eating the bread," "he" has the same role as in "he is eating" (without direct object). "He" remains the eater. "Eat" is therefore always called transitive. The role of "he" does not change.



- **5.70** In English, one says "be something or somebody" and "become something or somebody." "Be something" and "become something" do not differ from "eat something" and "drink something." In every case, "something" immediately follows the verb. It is almost as if "be" and "become" are transitive in English.
- **5.71** English "be" very often has no equivalent in Egyptian. Just consider the absence of a verb meaning "be" in the substantival sentence, the adjectival sentence, and the adverbial sentence, all described in Chapter Four.

Occasionally, however, "be" needs to be specified, for example, when "be" happens in the future

. One then uses a verb meaning "be," namely wnn. In English, one says "be something." In Egyptian, however, one says wnn m, literally "be in (something)." For example, "be (a

farmer)" is  $\frac{1}{2}$  wnn m (sty).

Because mn "be" is followed by m, it expresses transient associations between

entities. This comes perhaps as no surprise. Verb forms of wnn necessarily appear in a certain tense, past, present, or future. This limitation to tense by itself makes the association transient.

5.73 pr "become" obviously expresses a transient association. As opposed to wnn, it conveys not only the transience of an association but also the *change* from one association to another.

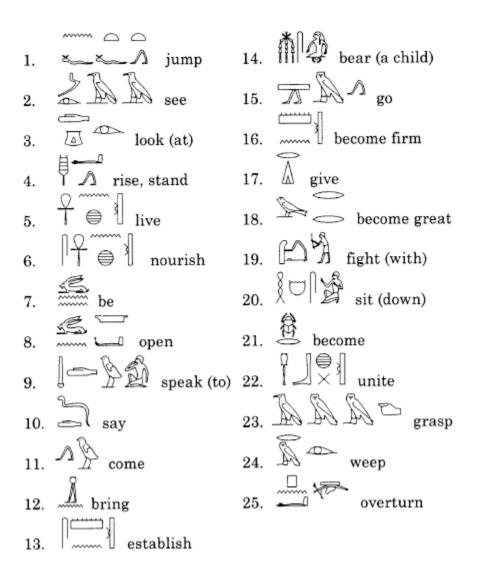
### **QUESTIONS**

- 1. What is the root of a verb? 2. Of which two elements linked to one another does the root consist?
- 3. What is the difference between root and stem? 4. Of what are the sound patterns of roots made up? 5. Which are the two weak consonants? 6. What is a sound pattern class? 7. Which are the four principal sound pattern classes? 8. What is a concept class? 9. What is the difference between transitive and intransitive? 10. Which are the three main types of intransitive verbs? 11. How and

why do mn and pr express transient associations between entities?

#### IDENTIFICATION OF SOUND PATTERN CLASS AND CONCEPT CLASS

Identify the sound pattern class (Dimension 1) and the concept class (Dimension 2) of the following verbs. As regards sound pattern class, the transcriptions of all the verbs are listed at the end in alphabetical order. As to concept class, each verb is either transitive or intransitive. Transitive verbs are those of which certain verb forms can be followed immediately by dependent pronouns, whereas the same verb forms of intransitive verbs cannot. The information provided below is not sufficient to securely identify every verb as either transitive or intransitive. English idiom is quite often but not always helpful. Use an Egyptian dictionary if available.



## **Transcriptions**

"Alphabetical" sequence:  $3, j,^c, w, b, p, f, m, n, r, h, ., s, \check{s}, q, k, g, t, d,$ 

<i>3b</i>	c3	$pn^c$	nftft	$s^c n$
3mm	cc	m33	rm(y)	smn
jw(y)	wn	mn	rd(y)	šm
jn(y)	wnn	ms(y)	ms(y)	dg(y)
$^{c}n$	wrr	mdw	pr	d

## LESSON 26 (§§ 5.74–115)

## III THE THIRD DIMENSION: INFLECTION

#### **Abbreviations**

2 = second person

3 =third person

G = gender m = masculine

f = feminine

N = number s = singular

p = plural

#### **Coordinates**

- 1. direct inflection only (verb forms without auxiliary)
  - 1.1. absence of inflection
  - 1.2. single inflection
    - 1.2.1. conjugation (PGN or PN)
      - 1.2.1.1. suffix conjugation

1s 2ms 2fs 3ms 3fs lp 2p 3p

1.2.1.2. stative conjugation

1s 2s 3ms 3fs lp 2p 3mp 3fp

- 1.2.2. declension (GN or N)
  - 1.2.2.1. declension by adjectival endings

ms fs mp fb

1.2.2.2. declension by third person suffix pronouns

ms fs p

1.3. double inflection

(declension by adjectival endings + suffix conjugation)

- 2. indirect and direct inflection combined (with auxiliary)
  - **2.1.** absence of inflection + absence of inflection
  - **2.2.** absence of inflection + single inflection
    - **2.2.1.** absence of inflection + suffix conjugation
    - **2.2.2.** absence of inflection + stative conjugation
  - **2.3.** single inflection + absence of inflection
    - **2.3.1.** conjugation + absence of inflection
      - **2.3.1.1.** suffix conjugation. + absence of inflection
      - **2.3.1.2.** stative conjugation + absence of inflection
      - **2.3.1.3.** conjugation by depend. pron. + absence of inflection

1s 2ms 2fs 3ms 3fs 3s ("it") 1p 2p 3p

- **2.3.2.** declension + absence of inflection
  - **2.3.2.1.** declension by adject. endings + absence of inflection
  - **2.3.2.2.** declension by 3s/3p suff. pron. + absence of inflection
- **2.4.** single inflection + single inflection
  - **2.4.1.** parallel conjugation (conjugation + conjugation)
    - **2.4.1.1.** suffix conjugation + suffix conjugation
    - **2.4.1.2.** conjug. by depend. pronouns + suffix conjugation
    - **2.4.1.3.** suffix conjugation + stative conjugation
    - **2.4.1.4.** conjug. by depend. pronouns + stative conjugation

- **2.4.1.5.** stative conjugation + stative conjugation
- **2.4.2.** parallel inflection (declension + conjugation)
  - **2.4.2.1.** declension by adject. endings + suffix conjugation
  - **2.4.2.2.** declension by adject. endings + stative conjugation
- **2.5.** double inflection + absence of inflection
- **2.6.** double inflection + single inflection

or, declension + conjugation + conjugation

or, declension + parallel conjugation

#### A. THE STRUCTURE OF INFLECTION

**5.74** Before listing the complete coordinates of inflection in section B, it will be useful to describe the structure of inflection, proceeding from the simple to the complex.

## 1. The Concept of Inflection: Entities

- **5.75** It has been noted more than once above that everything in language is links between concepts and sound patterns. Inflection is no exception. Defining inflection therefore requires defining both its concept and its sound pattern.
- **5.76** The concept of inflection is to refer to one or two entities playing one of two roles in the instance of change expressed by a verb form. The two roles can be broadly defined as performing the instance of change and undergoing it. Absence of inflection, which refers to zero entities, is the third option.

## 2. The Sound Pattern of Inflection: Inflectional Endings

**5.77** The sound pattern of inflection consists of *inflectional endings*. Each inflectional ending refers to one entity as its concept.

An example of an inflectional ending is t in  $\bigcirc$  jrrt "she who does." The inflectional ending t refers to an entity, which is translated by "she who." A second example, then, is the inflectional ending s in s in t "she said." This ending refers to the entity denoted in translation by "she."

- **5.78** Inflection also occurs in *adjectives*. The absence of an ending in nfr "good *one* (masc.)" denotes a masculine singular entity. The inflectional ending t in nfrt "good *one* (fem.)" denotes a feminine singular entity.
- 5.79 By contrast, the endings of *substantives*, such as cap t in cap t in cap t in cap t in the endings are therefore not inflection, even if their sound pattern is the same as the adjective's inflectional endings. In brief, substantives denote *one* thing, an entity, as in cap t irt "eye," whereas

adjectives mostly denote two, a **property** and an entity, as in a nfrt "good one."

It appears that *verb forms* and *adjectives* share something that substantives do not have. Both include a reference to an entity in addition to what else it is that they express.

0

**5.80** Suffix pronouns attached to substantives, as in pr.j "my house" and pr.k "your house," also refer to entities. But they are optional and are therefore not classified here as

## 3. Entities as Linked to Inflectional Endings

**5.81** The *concept* of inflection consists of *entities*. The *sound pattern* of inflection consists of *inflectional endings*. The *link* between the two is that inflectional endings *refer to* entities.

To how many entities does a verb form's inflection refer? There are *three* possibilities. Verb forms refer to *zero*, *one*, or *two* entities.

How many inflectional endings does a verb form's inflection exhibit? There are *four* possibilities. Verb forms have *zero*, *one*, *two*, or *three* inflectional endings.

Verb forms with *zero* inflectional endings obviously refer to *zero* entities. Verb forms with *one* inflectional ending obviously refer to *one* entity. But verbs forms with *two* inflectional endings refer to *one* or to *two* entities. And verb forms with *three* inflectional endings always refer to *two* entities. All this may be summarized in the following table.

0 inflectional endings	0 entities
1 inflectional ending	1 entity
2 inflectional endings	1 or 2 entities
3 inflectional endings	2 entities

## 4. Parallel Inflectional Endings

**5.82** Each inflectional ending refers to an entity. Yet the table above shows two cases in which there is *one more* inflectional ending than there are references to entities: *two* inflectional endings can refer to *one* entity and *three* inflectional endings always refer to *two* entities. The simple reason is that two inflectional endings can refer to the same entity. When this happens, the two inflectional endings are *parallel*.

## 5. The Only Three Elements in the Concept of Inflectional Endings: Person, Gender, and Number

- **5.83** The concept of each inflectional entity is an entity. Three elements make up this total concept: person, gender, and number. If the inflectional ending's concept is a molecule, then only three types of atoms are found at most in this molecule: an entity's person, an entity's gender, and an entity's number.
- **5.84** *Person* is the role the entity plays in the speech act. There are *three* persons. The *first* person is the person who is speaking or writing (the "I" person). The *second* person is the person spoken or written to (the "you" person). The *third* person refers to anyone or anything else.

Whereas the first and the second persons, the speaker and the hearer, are typically human beings, the third person may be a person, an animal, or a thing. In fact, the third person is best viewed as a residual category. It encompasses all that is not the first person or the second person.

Together, the first person or speaker and the second person or hearer can be referred to as the *interlocutors*, the two entities communicating in the speech act.

**5.85** *Number* denotes how many entities the inflectional ending refers to. There are *three* numbers, depending on how many entities are denoted. The *singular* refers to *one* entity. The *plural* refers to *two or more* entities. The *dual* refers specifically to *two* entities.

Dual endings are rare and gradually become extinct in Middle Egyptian. They will not be treated

systematically here. Detailed descriptions are found in the standard reference grammars.

**5.86** *Gender* denotes the *grammatical* gender. The entity's grammatical gender is the gender of the *substantive* that denotes the entity. There are *two* genders. The *masculine* gender refers to entities denoted by masculine substantives. The *feminine* gender refers to entities denoted by feminine substantives.

In some instances, an entity's grammatical gender is also its natural sex. Masculine and feminine inflectional endings then denote entities that are not only masculine or feminine but also male or female.

## 6. The Possible Combinations of Person, Gender, and Number in Inflectional Endings

- **5.87** The concept of each inflectional ending is one entity. Each such entity as a concept is made up of *one, two*, or *three* from a total of *three* features, namely person, gender, and number. The following three rules apply.
- **5.88** First, person, gender, and number obviously appear *no more than once* in an inflectional ending. Each of the atoms of person, gender, and number are found no more than once in the molecule that is the inflectional ending.
- **5.89** Second, person, gender, and number appear in *one* out of *two* or *three* possible shapes. The person is either *first* (1), *second* (2), or *third* (3). The gender is either *masculine* (**m**) or *feminine* (**f**). The number is either *singular* (**s**), *plural* (**p**), or *dual* (the rare dual will be largely disregarded in the present classification). Similarly, the atoms of a molecule may differ in shape owing to the number of protons or electrons.
- **5.90** Third, person, gender, and number appear in *one* of *four* combinations. These four combinations are listed in the following table.

person	gender	number
person	_	number
_	gender	number
_	_	number

**5.91** Examples of these four combinations are as follows. An example of the combination *person*, gender, plus number is found in jrr.f (3ms) "that he does." Person plus number occurs in jrr.j (1s) "that I do." Gender plus number is found in jrr.f (fs) "she who does." Number alone is found in jr.ty.sn (p) "they who will do."

## 7. The Two Strings of Inflectional Endings: Conjugation and Declension

**5.92** Inflectional endings with their concepts occur in strings of *three*, *four*, *eight*, or *nine* members. The dual is disregarded. There are *only two* main types of strings of inflectional endings. One type

- exhibits person. The other does not. The type of string displaying person is *conjugation*. Strings of conjugation have *eight* or *nine* members. The type of string that does not display person is called *declension*. Strings of declension have *three* or *four* members.
- **5.93** To *conjugate* a verb form is to produce all its inflectional endings of conjugation. To *decline* a verb form is to produce all its inflectional endings of declension.

## 8. The Three Types of Conjugation and the Two Types of Declension, Each Type Distinguished by Sound Pattern

- **5.94** There are three types of conjugation and two types of declension. Conjugation types roughly share the same concept, as do declension types. But their sound patterns clearly differ. Distinguished by sound pattern, the three types of conjugation are the *suffix* conjugation, the *stative* conjugation, and conjugation *by means of dependent pronouns*. Also distinguished by sound pattern, the two types of declension are declension *by means of adjectival endings* and declension *by means of third person suffix pronouns*.
- **5.95** A special case is the *imperative*. It can be viewed as a fourth type of conjugation. This type is limited, however, to the *second person*. As regards *number*, the singular has no ending and the plural presumably has the ending w, mostly written with the plural strokes. Singular and plural are often written alike, however. Hieroglyphic writing does not reveal any distinctions in *gender* in the imperative.

## 9. Substitution of Inflectional Endings by Other References to Entities

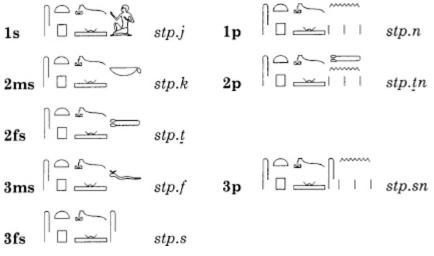
5.96 Five types of inflection have been listed in § 5.94. Three are conjugation. Two are declension. The sound patterns of two of the five types are *personal pronouns*. One type is expressed by *suffix* pronouns. The other is expressed by *dependent* pronouns. These two types of conjugation have a property that sets them apart from the three other types of inflection. In them, the inflectional ending can *alternate* with other references to entities. For example, "f"he" alternates with s"man" in "jrr.f"that he does" and "jrr s"that a man does." The definition of inflection may be broadened to include these other references to entities. By contrast, the other three types of inflection always feature an inflectional ending. Other references to entities precede

## 10. The First Type of Conjugation: The Suffix Conjugation

them, as will be seen later.

(eight options) 1s 2ms 2fs 3ms 3fs 1p 2p 3p

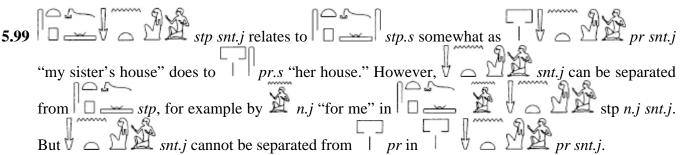
**5.97** In the suffix conjugation, suffix pronouns ( $\sum_{j}$ ,  $\sum_{k}$ , and so on) are attached to the verb as in the list below. There are hence as many sub-coordinates as there are suffix pronouns. Many verb forms exhibit the suffix conjugation.



No translation is possible of these writings because they are writings of more than one verb form.

The element tw "one" may alternate with suffix pronouns, as in stp.tw. The suffix conjugation occasionally appears without a personal pronoun. It then also seems to refer to impersonal "one."

5.98 Other references to entities may alternate with third person singular or plural suffix pronouns. For example, solution solution solution solution solution solution steps and <math>solution solution solution solution steps and <math>solution solution solution solution solution steps and <math>solution solution soluti



## 11. The Second Type of Conjugation: The Stative Conjugation

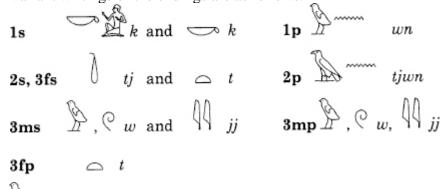
(eight options, five writings) 1s 2s 3ms 3fs 1p 2p 3mp 3fp

**5.100** Special stative endings are attached to the stem. There are *five* written endings. It is not clear how many spoken endings they represent. A full paradigm is as follows.

1s
$$\Box$$
 $Stp.kw$ I having been chosen2s $\Box$  $Stp.tj$ you having been chosen3ms $\Box$  $Stp$ he having been chosen3fs $\Box$  $Stp.tj$ she having been chosen1p $\Box$  $Stp.tj$ we having been chosen2p $\Box$  $Stp.tjwny$ you having been chosen3mp $\Box$  $Stp.tjwny$ you having been chosen3fp $\Box$  $Stp.tj$ they (masc.) having been chosen3fp $\Box$  $Stp.tj$ they (fem.) having been chosen

The translations anticipate what has been or will be discussed elsewhere: (1) the stative of transitive verbs is associated with the *passive* rather than with the active (§ 5.343); (2) it *describes* a state and implies a process (§§ 5.4–5); (3) by itself, it denotes a circumstance, that is, it is adverbial (see Part 2).

**5.101** Variant writings of the endings are as follows.



- **5.103** 3ms and 3mp are mostly written without an ending, as in stp. The endingless forms therefore resemble many other verb forms in writing. Again, one assumes a difference existed in speech.
- **5.104** As opposed to the suffix conjugation and the conjugation by dependent pronouns, the inflectional endings of the stative conjugation do not alternate with other references to entities. What happens

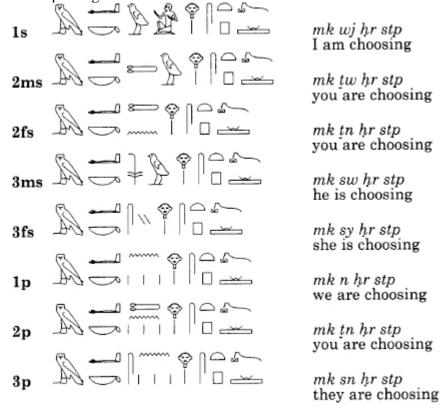
when a state applies to an entity other than a personal pronoun, such as sn.j "my brother" or snt.j "my sister"? The other reference to an entity then precedes the stem and agrees in gender and number with the third person ending of the stative. Examples are sn.j stp "my brother having been chosen" and snt.j stp.tj "my sister having been chosen."

## 12. The Third Type of Conjugation: Conjugation by Dependent Pronouns

(nine options) 1s 2ms 2fs 3ms 3fs 3s ("it") 1p 2p 3p

5.105 Conjugation by dependent pronouns is found after non-enclitic particles. The principal particles are jsk. Another particle is jsk. The meaning of these particles is discussed at §§ 4.122–23.

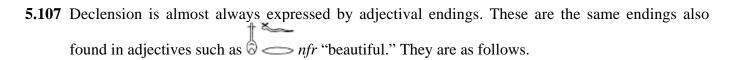
**5.106** A full paradigm is as follows.

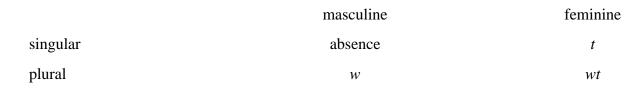


A ninth option, which is the suffix conjugation, the personal pronoun may alternate with other references to entities, as in which is choosing."  $mk \ sr \ stp$  "it is choosing," has not been listed as it is hardly meaningful. As in the suffix conjugation, the personal pronoun may alternate with other references to entities, as in which is choosing."

## 13. The First Type of Declension: Declension by Adjectival Endings

(four options) ms fs mp fp





5.108 The plural is written mostly with plural strokes, as in mp and stpw. The w of the feminine plural is never written out; an example is fp stpt "who are chosen" (referring to women).

## 14. The Second Type of Declension: Declension by Third Person Suffix Pronouns

(three options) ms fs p

- **5.110** As opposed to adjectival endings, suffix pronouns exhibit no difference between masculine and feminine in the plural.
- **5.111** When they denote declension, suffix pronouns are always preceded by the infix  $\forall ty \ (\S 5.206)$  This infix is also often written cond t(y).  $\forall ty$  follows determinatives. cond t precedes determinatives.
- **5.112** The singular suffix pronouns can be spelled  $\bigvee fy$  and  $\bigvee sy$ . Perhaps,  $\bigvee y$  was just a feature of writing and not of pronunciation.

**5.113** Generic examples are as follows.

## 15. Specific Combinations of Person, Gender, and Number

**5.114** Four general combinations of person (P), gender (G), and number (N) exist: PGN and PN in conjugation and GN and N in declension. Every single inflectional ending exhibits number. The three other possible general combinations, that is, P, G, and PG, do not occur.

**5.115** There are *fifteen specific* combinations of the three persons (1, 2, and 3), the two genders (**m** and **f**), and the two numbers (s and p); the rare dual number is disregarded. Ten specific combinations occur in conjugation: 1s, 2ms, 2fs, 3ms, 3fs, 1p, 2p, 3p, 3mp, and 3fp. Five occur in declension: ms, fs, mp, fp, and p.

If 2ms and 2fs in the stative conjugation are considered one, 2s would be the sixteenth specific combination, the eleventh in conjugation.

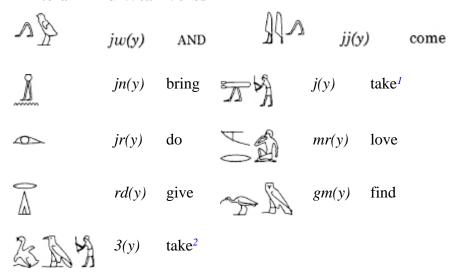
#### **OUESTIONS**

1. Of what does the concept of inflection consist? 2. Of what does the sound pattern of inflection consist? 3. What is the concept of an inflectional ending? 4. How many inflectional endings do verb forms have? 5. Why and when does a verb form's inflection refer to fewer entities than it has inflectional endings? 6. Of which three elements is the concept of all inflectional endings made up? 7. In which possible shapes do these three elements appear in inflectional endings? 8. Which are the two types of strings in which series of inflectional endings cluster? 9. Which are the five subtypes of these two types of strings (three for one type, two for the other)? 10. In which two subtypes do inflectional endings alternate with other references to entities? 11. In which four general combinations do person, gender, and number occur in inflectional endings? 12. In which fifteen specific combinations do person, gender, and number occur in inflectional endings?

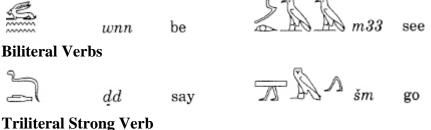
#### THIRTEEN VERBS FOR MEMORIZATION

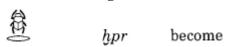
Knowledge of the following common verbs is presupposed in solving exercises in this lessons.

#### **Triliteral Third-Weak Verbs**



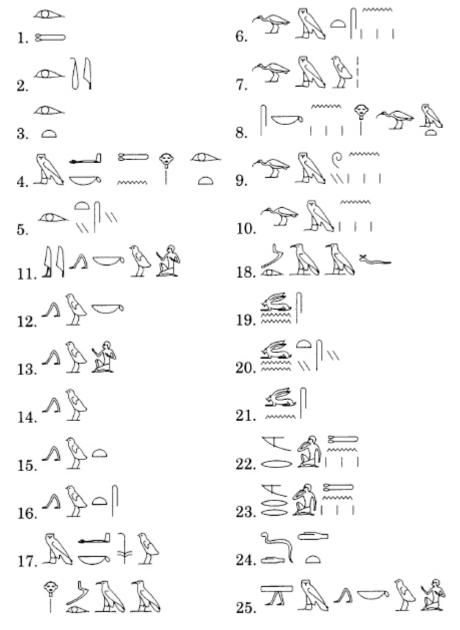
#### **Triliteral Second-Doubling Verbs**





#### **EXERCISE IN IDENTIFYING INFLECTIONAL ENDINGS**

Each verb form listed below has one inflectional ending. Transcribe the verb form, identify the meaning of the verb, locate the inflectional endings, identify the type of conjugation or declension, and determine the specific person, gender, and number combination. More than one solution may be possible. Some inflectional endings are expressed by the absence of an ending, such as 3ms in the stative conjugation and ms in the declension by adjectival endings. It is not necessary to transcribe the unwritten weak consonant in third-weak verbs, even though it is important to be able to identify a verb as third-weak.



¹ "Take" in the sense of "go to a place and take (something) along," involving motion, as one can see from the walking legs. The verb is transitive and therefore not classified as a verb of motion by convention. Only intransitive verbs are because they exhibit special behavior (Chapter Six).

²"Take" in the sense of "seize, grasp," involving motion of the arms but not of the legs.

## LESSON 27 (§§ 5.116-63)

## 16. The Two Locations of Inflectional Endings: Attached to the Stem (Direct Inflection) or to an Auxiliary (Indirect Inflection)

**5.116** Inflectional endings are the basic unit of inflection. So far, they have been fully described by themselves. Before proceeding, what has been said before may be summarized as follows.

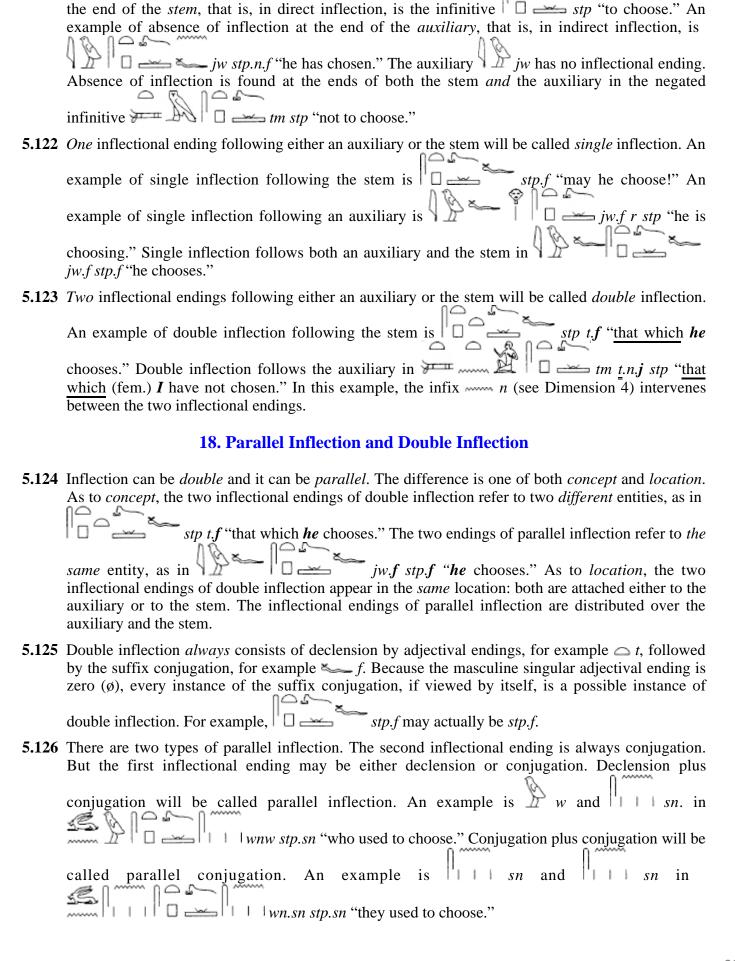
The concept of each inflectional ending is an entity. If this concept is a molecule, then the three only atoms occurring in each molecule are person (P), gender (G), and number (N). These three atoms occur in four combinations: PGN, PN, GN, or N. Moreover, P appears in one of three options, namely 1, 2, or 3, G in one of two options, namely m or s, and N in one of two options, namely s or p.

Furthermore, the molecules of the inflectional endings line up in two types of strings: conjugation, whose string counts eight or nine members, and declension, whose string counts three or four members. Conjugation expresses person, declension does not. According to sound pattern, there are three types of conjugation: suffix conjugation, stative conjugation, and conjugation by dependent pronouns. According to sound pattern, there are two types of declension: declension by adjectival endings and declension by third person suffix pronouns.

- **5.117** Where can inflectional endings be found? There are *two* locations. Inflectional endings can be *attached to the stem*. Or they can be *attached to an auxiliary*. *Stem* inflection will be called *direct* inflection. *Auxiliary* inflection will be called *indirect* inflection.
- **5.118** Direct inflection is attached either immediately to the stem or to a component that is itself attached to the stem. Immediate attachment occurs in stp.f. Attachment to a component occurs in stp.f. In this case, the component that intervenes between the stem and inflection is the infix stp.f.
- 5.119 Auxiliaries, described in Dimension 4, precede the stem. Indirect inflection therefore always precedes the stem. An example of indirect inflection is found in the verb form  $jw.f \ r \ stp$  "he is choosing." The inflectional ending f is attached to the auxiliary f is attached to the auxiliary f is attached to the stem f is also attached to the stem f is attached to the stem

## 17. The Number of Inflectional Endings in Either Location (Direct or Indirect Inflection): None, One, or Two

- **5.120** In what precedes, the *make-up* of every possible inflectional ending was first described. Two *strings* of inflectional endings, conjugation and declension, were then distinguished by concept, namely absence or presence of the feature person. Five *subtypes* were distinguished by sound pattern, three types of conjugation and two types of declension. The two *locations* of inflectional endings were noted next, namely attached to the stem or attached to an auxiliary. The question to be answered next is: *How many* inflectional endings does one find in either of these two locations? The answer is *none*, *one*, or *two*.
- **5.121** No inflectional ending will be called absence of inflection. An example of absence of inflection at



## 19. Direct Inflection Only and Indirect and Direct Inflection Combined

**5.127** The two locations in which inflectional endings occur have so far been considered *individually*. It appears that the auxiliary and the stem may both exhibit absence of inflection, single inflection, or double inflection. That is, either may refer to zero, one, or two entities. It is now necessary to consider the two locations of inflectional endings *jointly*.

The inflectional endings too have so far been viewed *individually*. Various distinctions were made according to *concept* (conjugation vs. declension), *sound pattern* (suffix, stative, or dependent pronoun conjugation; declension by adjectival endings or third person suffix pronouns), *location* (indirect vs. direct), and *number* of endings in either location (absence, single, double).

Now for the first time, inflection will be examined from the point of view of *entire* verb forms.

- **5.128** In terms of inflection, there are two main types of verb forms: those *without* an auxiliary and those *with* an auxiliary. The auxiliaries are listed in Dimension 4. Verb forms *without* an auxiliary have inflection in just *one* location, namely attached to the stem. In other words, they exhibit *direct inflection only*. Verb forms *with* an auxiliary have inflection in *two* locations, namely attached to the auxiliary and attached to the stem. In other words, they exhibit *indirect and direct inflection combined*.
- **5.129** There is no need to describe *direct inflection only* in more detail. The three main distinctions have been listed in section 16 above. They are absence of inflection, single inflection, and double inflection. But *in direct and indirect inflection combined*, binary combinations of absence of, single, and double inflection occur. These combinations are reviewed next.

## 20. The Six Binary Combinations of Absence of, Single, and Double Inflection in Indirect and Direct Inflection Combined

**5.130** Both the auxiliary and the stem may exhibit *absence* or *presence* of inflection. *Four* theoretical possibilities result.

ABSENCE ABSENCE

ABSENCE PRESENCE

PRESENCE ABSENCE

PRESENCE PRESENCE

**5.131** *Presence* of inflection can be subdivided into *single* inflection and *double* inflection. *Nine* theoretical possibilities result.

ABSENCE ABSENCE

ABSENCE SINGLE

ABSENCE DOUBLE

SINGLE ABSENCE

SINGLE SINGLE

SINGLE DOUBLE

DOUBLE ABSENCE

DOUBLE SINGLE

#### DOUBLE DOUBLE

**5.132** However, only *six* binary combinations of absence of inflection, single inflection, and double inflection out of a possible nine actually occur. They are as follows. The number of inflectional endings and entities referred to is noted for each combination.

BINARY	COMBINATION	<i>ENDINGS</i>	<b>ENTITIES</b>
INDIRECT	DIRECT		
ABSENCE	ABSENCE	0	0
ABSENCE	SINGLE	1	1
SINGLE	ABSENCE	1	1
SINGLE	SINGLE	2	1
DOUBLE	ABSENCE	2	2
DOUBLE	SINGLE	3	2

- **5.133** When the number of entities is *one lower* than the number of inflectional endings, two inflectional endings are in *parallelism* (§ 5.110). This happens in rows 4 and 6.
- **5.134** Of the six combinations, the three involving single inflection are the most frequent, that is absence + single, single + absence, and single + single. The three others are rare.

#### 21. Absence + Absence

5.135 This combination is rare. An example with the negation word tm as auxiliary is tm wnm "not to eat." The infinitive tm and the negatival complement wnm both exhibit absence of inflection. Another example is tm and the infinitive smt both exhibit absence of inflection

#### 22. Absence + Single

- 5.136 This combination is common. The single inflection is always *conjugation*, never declension. Furthermore, the conjugation is as a rule the *suffix* conjugation, as in stp.n.f "he has chosen."

¹ CT III 47a B3C.

²BD 51 Nu ed. Budge 1898, 123,5.

be alive." The infinitive exhibits absence of inflection.  $\uparrow \quad \bigoplus \quad \sum_{c} c_{nw}$  seems to be **3ms** of the stative.

### 23. Single + Absence

**5.138** This combination is common. There are *five* types. The single inflection is either *conjugation* or *declension*. The conjugation is *suffix* conjugation, *stative* conjugation, or conjugation by *dependent pronouns*. The declension is either declension by *adjectival endings* or declension by *third person suffix pronouns*.

## a. Suffix Conjugation + Absence

5.139 An example is jw.f r stp "he is choosing." The auxiliary jw exhibits suffix conjugation. The preposition plus infinitive r stp exhibits absence of inflection.

### **b.** Stative Conjugation + Absence

5.140 An actual example is wnn.tj r šmt jwt "while it is going and coming."

## c. Conjugation by Dependent Pronouns + Absence

¹Eb. 110,5.

## **d.** Declension by Adjectival Endings + Absence

**5.142** An example is  $\frac{1}{2}$  wnn r stp "who (masc. sing.) is choosing." The masculine singular is expressed by absence of an ending.

## e. Declension by Third Person Suffix Pronouns + Absence

5.143 An example is tm.ty.fy stp "who (masc. sing.) will not choose."

### 24. Single + Single

**5.144** This combination is common. The two inflectional endings are always parallel. The *second* ending is always *conjugation*. The *first* ending is either *conjugation* or *declension*. Conjugation plus conjugation is *parallel conjugation*. Declension plus conjugation is *parallel inflection*. There are *five* types of parallel *conjugation* and *two* types of parallel *inflection*.

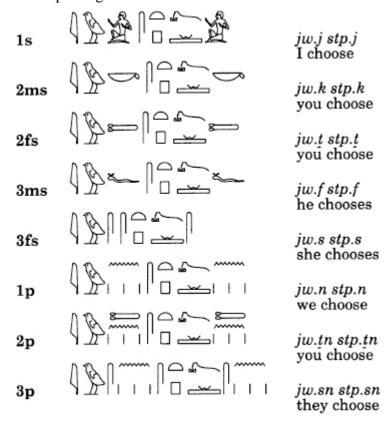
## a. Parallel Conjugation (Conjugation + Conjugation)

**5.145** Of the five subtypes, the first four are normal. Subtypes one and three are even quite common. Subtype five is very rare.

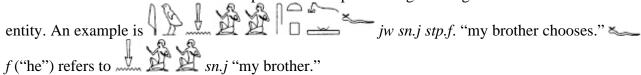
¹ BD 46 Ani ed. Budge 1898, 120,13.

## i. Suffix Conjugation + Suffix Conjugation

**5.146** A full paradigm is as follows.

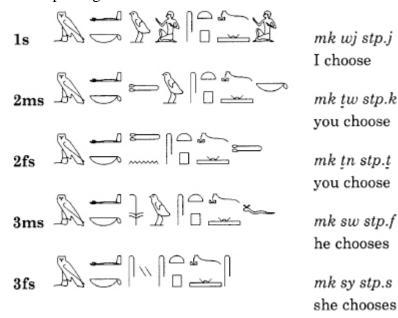


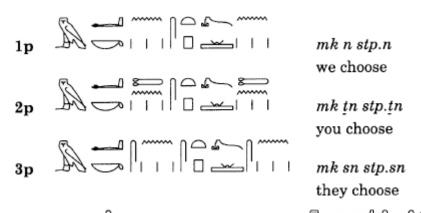
**5.147** Third person suffix pronouns as inflectional endings can *alternate* with other references to entities (§ 5.98). Of the *two* suffix pronouns in the above paradigm, it is the first that alternates with other references to entities. The other third person suffix pronoun agrees in gender and number with the



## ii. Conjugation by Dependent Pronouns + Suffix Conjugation

**5.148** A full paradigm is as follows.



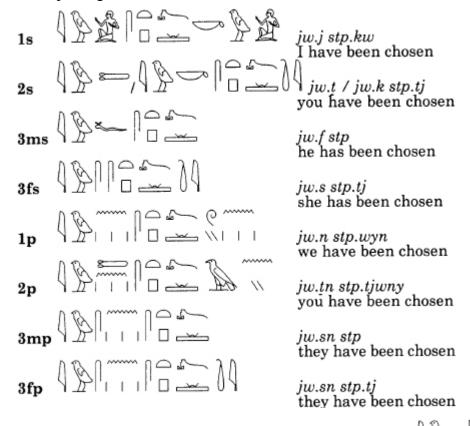


5.149 The option 3s st "it" has not been listed. The option 3s st "it" has not been listed. The option 3s mk st stp.s "it chooses" is hardly meaningful.

5.150 As inflectional endings, third person suffix and dependent pronouns can alternate with other references to entities. In the above paradigm, it is the first personal pronoun that does, not the second. An example is mk sn.j stp.f "my brother chooses" (cf. § 5.147).

## iii. Suffix Conjugation + Stative Conjugation

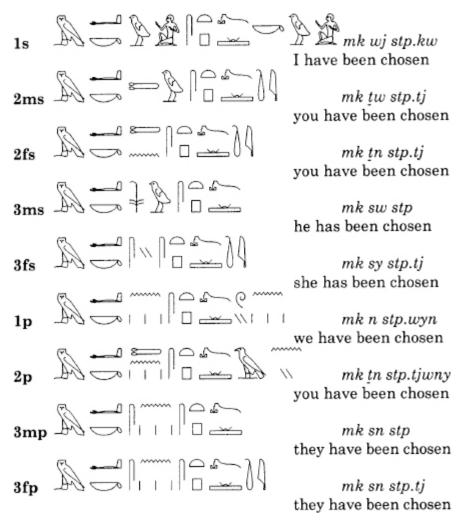
**5.151** A full paradigm is as follows.



**5.152** Here too, other entities serve as inflection, as in the verb form stp "my brother is chosen."

## iv. Conjugation by Dependent Pronouns + Stative Conjugation

**5.153** A full paradigm is as follows.



pronouns. An example is pronouns with third person dependent been chosen."

**The combination too, another reference to an entity may alternate with third person dependent pronouns. An example is pronounce to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with third person dependent pronounce. **The combination too, another reference to an entity may alternate with the combination too. **The combination too, another reference to an entity may alternate with the combination too. **The combination too, another reference to an entity may alternate with the combination too. **The combination too, another reference to an entity may alternate with the combination too. **The combination too, and alternate with the combination too. **The combination too, and alternate with the combination too. **The combination too, and alternate with the combination too. **The combination too, and alternate with the combination too, and alternate with the combination too. **The combination too, and alternate

## v. Stative Conjugation + Stative Conjugation

**5.155** This combination is very rare. It seems to occur only with the auxiliary wnn. It is mentioned for completeness' sake.

## **b.** Parallel Inflection (Declension + Conjugation)

## i. Declension by Adjectival Endings + Suffix Conjugation

**5.156** This combination is rare. An example is This combination is rare. An example is who used to choose."

## ii. Declension by Adjectival Endings + Stative Conjugation

5.157 This combination seems very rare. An example is the verb form with with wind with wind with stp.tj "who (fem.) is chosen."

¹ Examples are found in Eb. 110,5, Sh.S. 136–37, and Sin. B252–53.

#### 25. Double + Absence

**5.158** This combination is rare. It requires auxiliaries exhibiting double inflection. An example is  $\square \iff tm\underline{t}.n.\underline{j} stp$  "that which I have not chosen."

## 26. Double + Single

- 5.159 This combination is rare. An example is wnt.n.k stp.k "that which you used to choose."
- **5.160** The *double* inflection is, as always, declension by adjectival endings + suffix conjugation. The single inflection is always conjugation, apparently only the suffix conjugation. The present combination of three inflectional endings is declension by adjectival endings + suffix conjugation + suffix conjugation.
- **5.161** Verb forms exhibiting this combination are the only Middle Egyptian verb forms to have three inflectional endings. But they only refer to two entities. This is because the two endings of suffix conjugation refer to the same entity. They are parallel, as a case of parallel conjugation.

#### B. THE COMPLETE COORDINATES OF INFLECTION

5.162 What follows is a survey of the complete coordinates of inflection. The options are listed with a generic example.

#### 5.163 1. DIRECT INFLECTION ONLY (WITHOUT AUXILIARY)

#### 1.1. ABSENCE OF INFLECTION

-> 0 ENDINGS REFERRING TO 0 ENTITIES

#### 1.2. SINGLE INFLECTION

-> 1 ENDING REFERRING TO 1 ENTITY

1.2.1. conjugation

**1.2.1.1.** suffix conjugation

(§ 5.97) 
$$stp.f$$
 "may he choose"

**1.2.2.** declension

**1.2.2.1.** declension by adjectival endings

(§§ 5.107–8) 
$$\square$$
  $\simeq$   $stpt$  "who (fem. sing.) chooses"

**1.2.2.2.** declension by third person suffix pronouns

1.3. DOUBLE INFLECTION

> 2 ENDINGS REFERRING TO 2 ENTITIES

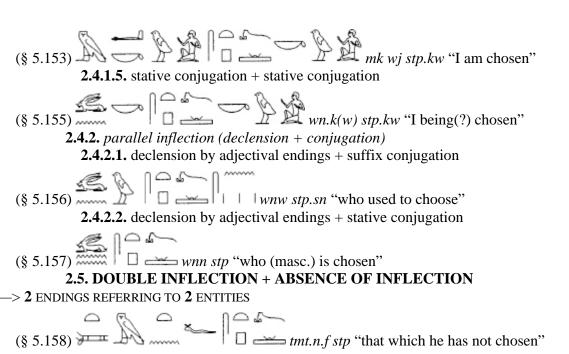
declension by adjectival endings + suffix conjugation

(§§ 5.124–25) 
$$\square$$
 stpt.f "that which he chooses"

### 2. INDIRECT AND DIRECT INFLECTION COMBINED (WITH AUXILIARY)

## 2.1. ABSENCE OF INFLECTION + ABSENCE OF INFLECTION > 0 ENDINGS REFERRING TO 0 ENTITIES (§ 5.135) 2.2. ABSENCE OF INFLECTION + SINGLE INFLECTION $\rightarrow$ 1 ENDING REFERRING TO 1 ENTITY **2.2.1.** *absence of inflection* + *suffix conjugation* jw stp.n.f "he has chosen" **2.2.2.** absence of inflection + stative conjugation wnn stp "to be chosen" (§ 5.137) ~ 2.3. SINGLE INFLECTION + ABSENCE OF INFLECTION $\rightarrow$ 1 ENDING REFERRING TO 1 ENTITY **2.3.1.** *conjugation* + *absence of inflection* **2.3.1.1.** suffix conjugation + absence of inflection $\iiint_{-\infty} \int_{-\infty}^{\infty} \int_$ **2.3.1.2.** stative conjugation + absence of inflection (§ 5.140) wnn r stp "who is choosing" **2.3.1.3.** conjugation by dependent pronouns + absence of inflection $\Rightarrow \stackrel{*}{\gg} \stackrel{\text{``}}{\parallel} \stackrel{\text{"lo}}{=} \stackrel{\text{$\longrightarrow$}}{=} mk \text{ sw } r \text{ stp "he is choosing"}$ (§ 5.141) **2.3.2.** *declension* + *absence of inflection* **2.3.2.1.** declension by adjectival endings + absence of inflection (§ 5.142) wnn r stp "who is choosing" **2.3.2.2.** declension by 3rd person suff. pron. + absence of inflection tm.ty.fy stp "who will not choose" 2.4. SINGLE INFLECTION + SINGLE INFLECTION $\rightarrow$ **2** ENDINGS REFERRING TO **1** ENTITY **2.4.1.** *parallel conjugation* (*conjugation* + *conjugation*) **2.4.1.1.** suffix conjugation + suffix conjugation (§ 5.145) **2.4.1.2.** conjugation by dependent pronouns + suffix conjugation **2.4.1.3.** suffix conjugation + stative conjugation

**2.4.1.4.** conjugation by dependent pronouns + stative conjugation



## 2.6. DOUBLE INFLECTION + SINGLE INFLECTION

 $\longrightarrow$  3 ENDINGS REFERRING TO 2 ENTITIES

or, declension + (suffix) conjugation + (suffix) conjugation or, declension + parallel conjugation

#### **QUESTIONS**

1. In which two locations in verb forms do inflectional endings appear? 2. How many appear in either location? 3. How does parallel inflection differ from double inflection? 4. Which two of the five types of inflectional endings alternate with other references to entities? 5. Which six binary combinations of inflection are there? 6. Which three are more common? 7. Which two exhibit parallel conjugation? 8. Which feature parallel inflection? 8. Which five types of parallel conjugation are there? 10. Which two types of parallel inflection?

#### EXERCISE IN IDENTIFYING THE NUMBER OF INFLECTIONAL ENDINGS AND THE NUMBER OF ENTITIES

Transcribe the 45 verb forms below. Identify the verb's meaning (for a list, see pp. 379–80). Describe inflection according to the following seven-step procedure (more than one solution may be possible).

#### Seven Decisions

- Decision 1 concerns whether a verb form exhibits inflection in *two locations* or in *one*. This is the same as asking whether there is an auxiliary or not. The answer is either indirect and direct inflection combined or direct inflection only. Auxiliaries are described in Dimension 4 below. But all one needs to know at this point is that elements *preceding* the stem of the verb are either an *auxiliary* or
- a preposition  $(n, r, or)^{-1}$  hr). Furthermore, the specific auxiliaries appearing in this exercise are listed on p. 419 below.
- Decision 2 concerns identifying the *number* of inflectional endings in the one or two locations in which inflectional endings appear, that is, after the auxiliary (if any) and after the stem. The answer for each location is *zero*, *one*, or *two* (*absence* of inflection, *single* inflection, or *double* inflection). Add up the total number of inflectional endings. No verb form has more than *three*.
- Decision 3 concerns establishing for each inflectional ending whether it has person or not.

Presence of person is *conjugation*. Absence is *declension*. Note that *no* verb form has *more than one* ending of *declension* (it is always the *first* inflectional ending when there is more than one). Also, *no* verb form has *more than two* endings of *conjugation*. Furthermore, the second ending (if any) is always *conjugation*. The third (if any) is always *suffix* conjugation.

- Decision 4 concerns identifying the specific *sound pattern* of each inflectional ending. For *conjugation*, the three choices are *suffix*, *stative*, or *dependent pronouns*. For *declension*, the two choices are *adjectival endings* or *third person suffix pronouns*.
- Decision 5 pertains only to verb forms with inflectional endings in *two* locations, exhibiting *indirect and direct inflection combined*. There are six choices: absence + absence, absence + single, single + absence, single + single, double + absence, double + single.
- Decision 6 concerns detecting parallel inflection or parallel conjugation. Verb forms have zero, one, two, or three inflectional endings. But these inflectional endings refer to zero, one, or two entities. In other words, the number of endings is the same as or one higher than the number of entities referred to. When the number of endings is one higher, two endings refer to the same entity. These two endings are said to be parallel.
- Decision 7 concerns identifying the specific combination of *person* (1, 2, or 3), *gender* (**m** or **s**), and *number* (**s** or **p**) exhibited by each inflectional ending.

#### The Seven Decisions Schematically

marks one option to be selected from two or more.

- (1) *location* of inflection
  - a. direct inflection only

(that is, absence of auxiliary)

b. indirect and direct inflection combined

(that is, presence of auxiliary)

- (2) number of inflectional endings (for one or for two locations)
  - (2.1) in the auxiliary (if any)
    - **a.** absence (0)
    - **b.** single inflection (1)
    - c. double inflection (2)
  - **(2.2)** in the stem
    - **a.** absence (0)
    - **b.** single inflection (1)
    - **c.** double inflection (2)
  - (2.3) total number of inflectional endings in the verb form
    - **a.** 0 **b.** 1 **c.** 2 **d.** 3
- (3) absence or presence of person
  - Verb forms have no more than three (3) inflectional endings.
  - Verb forms have no more than two (2) endings of conjugation.
  - Verb forms have no more than *one* (1) ending of declension.
  - The second and third inflectional endings (if any) are always conjugation. No choice is therefore needed in (3.2) and 3.3).
  - (3.1) *first* inflectional ending
    - a. absence of person (declension)
    - **b.** presence of person (conjugation)
  - [(3.2) second inflectional ending (always conjugation)]
  - [(3.3) third inflectional ending (always conjugation)]
  - (4) sound pattern of the inflectional ending

(4.1) *first* inflectional ending

**if a** in (3.1):

- a. declension by means of adjectival endings
- **b.** declension by means of suffix pronouns

**if b** in (3.1):

- **a.** suffix conjugation
- **b.** stative conjugation
- **c.** conjugation by dependent pronouns
- (4.2) second inflectional ending (always conjugation)
  - **a.** suffix conjugation
  - **b.** stative conjugation
- [(4.3) third inflectional ending (always suffix conjugation)]
- (5) binary combinations of inflection, for verb forms exhibiting indirect and direct inflection combined, that is, choice b in (1)

a. absence	+	absence
<b>b.</b> absence	+	single
c. single	+	absence
<b>d.</b> single	+	single
e. double	+	absence
<b>f.</b> double	+	single

- (6) number of *entities* referred to by the verb form's inflection (parallel inflection and parallel conjugation refer to one entity)
  - **a.** 0 entities

**b.** 1 entity

- c. 2 entities
- (7) specific combination of P, G, and N in each inflectional ending

<b>1</b> s	2ms	2fs	<b>2</b> s	3ms	3fs
1p	<b>2p</b>	<b>3</b> p	3mp	3fp	
ms	fs	mp	fp	p	

## Further Preliminary and Preparatory Remarks to the Exercise

• Each verb forms has *three* parts: the *stem*, the *inflection*, and verbal *components*. The components are introduced systematically only in Dimension 4 below. But they are listed here provisionally so that they might be identifiable for the purpose of the present exercise. The following components

occur: gemination of the second consonant of the root of  $\int jn(y)$  (30, 31, 32); the infinitive ending  $\int t$  (3, 8, 36); the infixes  $\int jw$  (8, 9, 12, 13, 45),  $\int jsk$  (14, 42),  $\int jsk$  (14, 42),  $\int jsk$  (11, 17),  $\int jsk$  (3, 15, 16, 20, 21, 34, 35, 36, 37, 44),  $\int jsk$  (7), and  $\int jsk$  (7), and  $\int jsk$  (7), and  $\int jsk$  (8, 13), and  $\int jsk$  (7), and  $\int jsk$  (7), and  $\int jsk$  (8, 13), and  $\int jsk$  (7), and  $\int jsk$  (8, 14).

• So far it is assumed that all that needs to be identified is *visible*. However, an important skill in reading Middle Egyptian is to recognize *nothing-ness* as significant. There are two main possibilities. Nothing is either *absence* of inflection. Or it is *presence* of inflection. If it is presence, nothing is called zero. Zero is a *significant* nothing. There exists more than one zero. Thus, one zero denotes ms in declension by adjectival endings. Another zero denotes 3ms and 3mp in the stative conjugation. Inflectional endings are attached either to the auxiliary or the stem. Auxiliaries

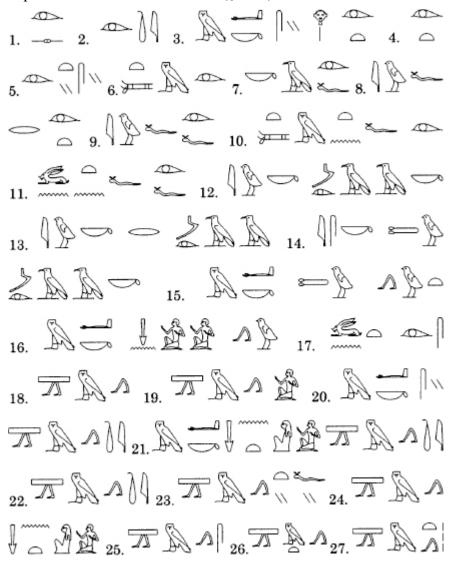
have not been introduced yet. For the purpose of this exercise, no ending always means absence of inflection in auxiliaries.

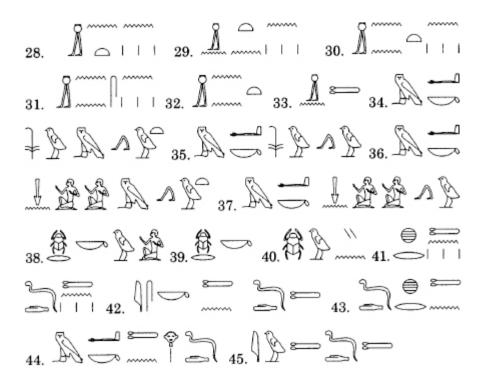
• In detecting double inflection, the following should be kept in mind. First, double inflection is always declension by adjectival endings plus suffix conjugation. Second, verb forms with auxiliaries never have double inflection in the stem. Because ms in the declension of double inflection is expressed by zero (0), every verb form with suffix conjugation and without an

auxiliary may be an instance of double inflection. For example,  $\leq$  could be single inflection (jr f) or double inflection ( $jr\phi f$ ).

Double inflection in auxilaries is rare. tm may have it in the combination double inflection + absence of inflection. tm may have it in double inflection + single inflection. Because auxiliaries have not yet been introduced, the declension of double inflection will always be feminine tm in this exercise, never the invisible masculine singular.

- In identifying inflectional endings, it needs to be kept in mind that certain combinations of inflectional endings do not occur.
- Note the abbreviated spellings of the stative (§ 5.101).
- Also keep in mind that other references to entities may alternate with personal pronouns in an expanded definition of inflection (§ 5.96).





## LESSON 28 (§§ 5.164-80)

# IV THE FOURTH DIMENSION: COMPONENTS

#### **COORDINATES**

#### ( UNOBSERVABLE COMPONENTS

§§ 5.178-80

vowels length short

long

stress unstressed

stressed

double consonants

**pause** (*immediately precedes* the stem)

absence of a pause

presence of a pause)

#### 1. GEMINATION (in stem)

§§ 5.181-90

- 1.1. *Type 1* (conjugation, declension, absence of inflection)
  - 1.1.1. non-geminating verb form
  - 1.1.2. geminating verb form
- 1.2. Type 2 (conjugation)
- 1.3. *Type 3* (declension)

 $\sim$ 

## 2. ABSENCE OR PRESENCE OF $\bigcirc$ R IN $\triangle$ RD(Y)"GIVE" (beginning of stem)

2.1. absence of r

§§ 5.191-96

2.2. presence of r

#### 3. "WEAK" CONSONANTS (end of stem)

§§ 5.197–203

3.1. D, Cw

- 3.1.1. in verb forms exhibiting absence of inflection
- 3.1.2. in verb forms exhibiting *conjugation*
- 3.1.3. in verb forms exhibiting declension
- 3.1.4. in verb forms exhibiting double inflection

_{3.2.} ∭*jj* 

- 3.2.1. in verb forms exhibiting *conjugation*
- 3.2.2. in verb forms exhibiting declension

3.2.3. in verb forms exhibiting double inflection 3.3. j in  $\bigcup_{tj}$ 3.3.1. in verb forms exhibiting declension 3.3.2. in verb forms exhibiting double inflection 4. SINGULAR SUBSTANTIVAL ENDING (end of stem) 5 .204-5 4.1. masculine singular: absence of ending 4.2. feminine singular:  $\triangle t$ 5. INFIXES (between stem and inflection) §§ 5.206–18 5.1. with all verbs, followed by suffix conjugation 5.1.1. single infix t, rarely 🎼 jjt □ 5.1.1.1. n (also double inflection)  $\Box$  5.1.1.2. □ 5.1.1.3. □ 5.1.1.5. tw, abbreviated  $\triangle t(w)$ 5.1.2. combinations of two infixes □ 5.1.2.1. + □ n.tw 5.2. with all verbs, followed by declension 5.3. with three verbs only, followed by suffix conjugation 5.3.1.  $\triangle t$  in the verb form  $\int_{-\infty}^{\infty} \int_{-\infty}^{\infty} jnt.f$ of the verb  $\int jn(y)$  "bring" 5.3.2.  $\triangle t$  in the verb form  $\bigwedge^{\Lambda} \sum_{jwt.f} jwt.f$ 

of the verb JT jw(y) "come"

5.3.3. ..... n in the verb form



### 6. PREPOSITIONS (immediately precede stem)

§ 5.219



r literally "on"

**6.2.** r literally "to(ward)"

6.3. m literally "in"

### 7. AUXILIARIES (precede stem; may be separated from it)

§§ 5.220-35

- **7.1. verbal auxiliaries** (derived from verbs; classified here by main constituent; includes negation auxiliaries)
  - 7.1.1. conjugated verb form or preposition plus infinitive as main constituent

7.1.1.1. derived from cc "stand"

7.1.1.2. derived from wnn "be"

7.1.1.3. auxiliaries derived from other verbs

7.1.2. infinitive as main constituent

7.1.2.1. the auxiliary  $\int jr(y)$  "do"

7.1.2.2. the auxiliary  $p_3$ 

"do in the past"

7.1.3. negatival complement as main constituent

(verbal negation auxiliaries)

7.1.3.1. the negation auxiliary tm

7.1.3.2. the negation auxiliary fin(y),

whose imperative form is  $M_m$ 

7.1.3.3. the negation auxiliary  $4 = \sqrt{1000} = \sqrt{1000}$ 

**7.2. non-verbal auxiliaries** (auxiliaries that are no longer patently verbs even if they probably derive from verbs

7.2.1. \\ \( \) jw

7.2.1.1. exhibiting absence of inflection

7.2.1.2. exhibiting suffix conjugation

 $7.2.2. \longrightarrow r$ 

7.2.2.1. exhibiting absence of inflection

7.2.2.2. exhibiting suffix conjugation

$$7.2.3.$$
  $\sim$   $\searrow$   $k3$ 

7.2.3.1. exhibiting absence of inflection

7.2.3.2. exhibiting suffix conjugation

#### ELEMENTS THAT CAN BE ASSOCIATED WITH AUXILIARIES: 7.3 AND 7.4

#### 7.3. other negations

7.3.4. 
$$n \dots | n \dots js$$

7.3.5. 
$$nfr n$$
 rare

7.3.7. 
$$w$$
 very rare; follows the stem!

## **7.4. particles triggering the use of dependent pronouns as conjugation** (two examples only)



#### **INTRODUCTION (§§ 5.164–80)**

#### a. Dimension 4 in relation to the Other Dimensions

### i. Dimensions 1, 2, 3 in relation to 4, 5, 6, 7, 8

**5.164** Dimensions **1, 2,** and **3** are a necessary part of a full definition of verb forms. But these three dimensions do not concern what quintessentially distinguishes one verb form from another.

Dimensions 1 and 2 are properties of roots. Verbs have these properties independently of any specific verb form. Dimension 3 describes inflection. Inflection concerns entities involved in the action or event denoted by the verb form. To express what quintessentially makes a verb form a verb form is the domain of Dimensions 4, 5, 6, 7, and 8.

## ii. Dimension 4 in relation to 5, 6, 7, 8

5.165 Dimension 4 is the counterpart of Dimensions 5, 6, 7, and 8. Dimension 4 encompasses tidbits of sound pattern. Dimensions 5, 6, 7, and 8 encompass tidbits of concept to which the tidbits of sound pattern in Dimension 4 are linked. Language is links between tidbits of sound pattern and tidbits of meaning. These links are inextricable connections. Dimension 4 is like one side of a sheet of paper of which Dimensions 5, 6, 7, and 8 are the other side.

## iii. Sound Pattern Dimensions (1, 3, 4) and Concept Dimensions (2, 3, 5, 6, 7, 8)

5.166 Everything in language is links between sound patterns and concepts. Although these inseparable links make language what it is, the elements that they link, namely sound pattern and concept, need to be described separately. The sound pattern side of verb forms is described by Dimensions 1 (sound pattern class of the stem) and 4 (components), and by half of Dimension 3 (inflection). The concept side of verb forms is described by Dimensions 2 (concept class of the stem), 5 (negation), 6 (voice), 7 (time), and 8 (function), and by half of Dimension 3 (inflection). Dimension 3 (inflection) is the only dimension describing both sound pattern and concept.

## iv. Links between Sound Pattern Dimensions and Concept Dimensions

- **5.167** The links that make language are like invisible wires running from a tidbit of sound pattern to a tidbit of concept and back. In this network of countless links, certain dimensions of sound pattern are much more densely linked to some dimensions of concept than to others. The following linkages are typical.
- **5.168** Dimension **1** (sound pattern class of root) is generally linked to Dimension **2** (concept class of root). This does not mean that a specific sound pattern class fully overlaps with a specific concept class. Rather, the sound pattern of a stem, whatever the sound pattern class, provides sufficient information about the concept of the stem, whatever the concept class.
- **5.169** One half of Dimension 3, the sound pattern side of inflection, is generally linked to the other half of Dimension 3, the concept side of inflection. Dimension 4, which is sound pattern, mostly provides information about Dimensions 5, 6, 7, and 8, which are concept.
- **5.170** All this may be summarized as follows.

SOUND PATTERN	CONCEPT	
Dimension 1	Dimension 2	
Dimension 3	Dimension 3	
Dimension 4	Dimension <b>5</b> , <b>6</b> , <b>7</b> , <b>8</b>	

#### v. Visible Dimensions and Invisible Dimensions

- **5.171** The concept side of language is the true message. Transmitting the concept side from one person to another is the ultimate aim of language. But the concept side needs a vehicle by which it can be transmitted. Concepts are therefore attached or linked to sound patterns. These sound patterns can be transmitted through the air from the mouth of the speaker to the ear of the hearer and by light from a sheet of paper to the eye of the reader.
- **5.172** Obviously, concepts are *not* transmitted. Only sound patterns are. But speakers who know the language can decode the sound patterns. Their minds know to which concepts any incoming sound patterns are linked. This is what it means to know a language. Those minds that do not know these links do not know the language. They can obviously *hear* the sound patterns of that language. But unable to connect them to concepts, they perceive these sound patterns as meaningless sound, or as meaningless signs in writing. On the other hand, anyone who knows Egyptian will link, say, the sound pattern *nfr* to the concept "beautiful."
- **5.173** It appears, then, that the more important side of language, concept or meaning, is not observable. It is neither audible nor visible. The following correspondences are typical.

visible or audible	sound patterns
invisible or inaudible	concepts

5.174 Dimensions 2, 5, 6, 7, and 8 and half of Dimension 3 refer to concepts and are therefore invisible. But they can be defined with varying degrees of precision by anyone who knows Egyptian. Dimensions 1 and 4 and half of Dimension 3 refer to sound pattern. They ought to be entirely visible in writing. But because hieroglyphic writing is defective, sound pattern dimensions remain partly invisible. The correspondences listed in § 5.173 can therefore be revised as follows.

visible or audible	part of the sound patterns
invisible or inaudible	part of the sound patterns
invisible or inaudible	concepts

## b. Seven Observable Component Types

- **5.175** The tidbits of sound pattern in Dimension 4 will be called verbal components, or just components. Components coincide roughly with what others would call morphemes. A component or morpheme is a little stretch of sound pattern linked to a tidbit of concept of its own. These tidbits of concept are described in Dimensions 5, 6, 7, and 8.
- **5.176** Seven visible component types may be distinguished.
  - (1) gemination
  - (2) absence or presence of r in rd(y) "give"
  - (3) "weak" consonants
  - (4) singular substantival endings
  - (5) infixes
  - (6) ) auxiliaries
  - (7) prepositions

The description that follows below is empirical. Little is said about the concept or meaning attached to the components.

**5.177** (1) Gemination appears in the stem. (2) Absence or presence of r appears at the beginning of

the stem. (3) "Weak" consonants appear at the end of the stem. (4) Substantival endings are attached to the stem. (5) Infixes are attached to the end of the stem and appear between stem and inflection. (6) Prepositions immediately precede the stem. (7) Auxiliaries precede the stem and may be separated from it.

#### c. Unobservable Components

- **5.178** Unobservable components include vowels, double consonants such as *tt* and *pp*, and absence of a pause. Vowels are unobservable because hieroglyphic writing does not represent them. They might have been visible if they had been written. By contrast, absence of a pause cannot be made visible, unless one chooses some random symbol. Vowels are something represented in writing by nothing. Absence of a pause is nothing (even if a significant nothing) represented by nothing.
- 5.179 In English and many other languages, absence of a pause is often used to subordinate one string of words to another. Compare the examples "I heard. He came" and "I heard he came." What distinguishes the two examples is absence or presence of a pause. Pause is defined here in the broadest sense. It includes any feature of speech marking the end of one sentence and the beginning of another. Absence of a pause is rendered in writing by absence of punctuation and absence of an upper case initial letter. If English had neither punctuation nor capital letters, both examples would look as follows in writing: "i heard he came." It would not be possible to know whether "he came" is subordinated or not. The inability to decide between independence and dependence is exactly the problem that the modern translator of ancient Egyptian faces in countless instances. Yet independence is absence of subordination and *vice versa*. The two are opposites. Something must mark the difference between opposites, if not in writing then in speech. It is assumed here that absence of a pause did.
- 5.180 Unwritten components probably contributed much to keeping verb forms distinct from one another. Methods have been developed to reconstruct these components with different degrees of plausibility. Discussing these methods exceeds the scope of this grammar, which is limited mainly to what is observable. Too often, all we have of a verb form is stem and inflection, as in stp.f. Such a writing hides many different verb forms. There is now wide-spread agreement on the number of generic verb forms. But it is often uncertain which generic stp.f a specific stp.f in a given text represents.

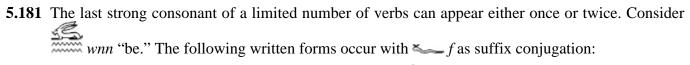
#### **QUESTIONS**

1. How do Dimensions 1, 2, and 3 differ from Dimensions 4, 5, 6, 7, and 8? 2. How does Dimension 4 relate to Dimensions 5, 6, 7, and 8? 3. Which are the sound pattern dimensions and which are the concept dimensions? 4. Which sound pattern dimensions are on the whole connected to which concept dimensions? 5. Which kind of dimensions are always invisible? 6. Which are the seven observable component types?

### LESSON 29 (§§ 5.181–96)

#### 1. Gemination

#### a. Definition





The contrast between nn and n is striking. Verb forms with double appearance of nn (nn) are called *geminating*. Verb forms exhibiting single appearance (nn) are called *non-geminating*. The term "gemination" will be used in two ways. First, "gemination" refers to the double writing of a consonant, as contrasted with the single writing. Second, "gemination" refers to the alternation between absence and presence of gemination, as it does in this section's title.

Sometimes texts exhibit presence of gemination where absence would seem to be expected. In such instances, scribal error is always a possibility to be reckoned with.

**5.182** The two identical consonants of geminated verb forms were probably separated by a vowel. It is generally assumed that two identical consonants not separated by a vowel were written as one, as in other ancient scripts.

#### b. Gemination and the Verb's Dictionary Form

5.183 Gemination in last-doubling verbs differs from gemination in other form classes. In last-doubling verbs, geminating forms resemble the verb's dictionary form. Thus, m33.f resembles the dictionary form m3.f is different. In other form classes, it is non-geminating forms that resemble the dictionary form. Thus, non-geminating mr(y).f resembles the dictionary form mr(y).f resembles the dictionary form mr(y).f differs.

## c. Different Degrees of Diagnostic Significance

5.184 Absence and presence of gemination exhibit different degrees of diagnostic significance when it comes to identifying verb forms. Gemination is crucial in distinguishing the two declined verb forms and a management of man

non-geminating m3. r.f. The presence of gemination in cannot be neglected as a fact. But it plays a negligible role in identifying the verb form.

#### d. The Three Types of Gemination

**5.185** In Type 1, absence and presence of gemination each denote several verb forms. In Types 2 and 3, presence of gemination denotes only one verb form; all the other verb forms exhibit absence of gemination according to these two types.

#### i. Type 1

- **5.186** This type occurs in most last–doubling and last-weak verbs. It is found in conjugation, declension, and absence of inflection, with different degrees of diagnostic relevance. Examples are geminating wnn.f "that he is" and non-geminating wn.f "so that he might be."
- 5.187 Among special writings, rd(y) "give" exhibits and dd.f. and dd.f. jr(y) "do" displays three writings: , and . The writing is clearly geminating (jrr.f). Seems to be non-geminating (jr.f). The writing is ambiguous. It is a writing for both jr.f and jrr.f. Over time, it increasingly more often denoted geminating jrr.f (Edel). Geminating jww.f of jw "come" is rare. Presumably, jw.f, with w written once, could be a writing of the verb form elsewhere written jww.f.

### ii. Type 2

**5.188** This type is rare. It occurs mainly in verbs with strong consonants that are not causative. An example is  $f^{cc}$ . j (Coffin Texts II 112e SIC), from  $f^{cc}$   $f^{cc}$  "grab." Perhaps only one verb form exhibits this type. It is a suffix conjugation in Dimension 3. It is passive, future, and mostly if not always substantival in Dimensions 6 to 8.

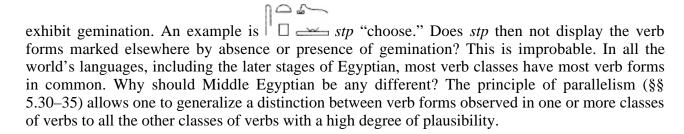
## iii. Type 3

This type is also rare. It occurs in some biliteral verbs. It appears in just one verb form exhibiting declension by means of adjectival endings in Dimension 3. This verb form is passive, past, and adjectival according to Dimensions 6 to 8. Examples are as follows:

**Addt** what has been said," from **Addt** what has been ordered," from **W/wd** w/wd** w/w

## e. Gemination and the Principle of Parallelism

**5.190** Absence and presence of gemination mark distinctions between verb forms. But many verbs do not



# 2. Absence or Presence of r in rd(y) "give"

#### a. Definition

**5.191** The second type of stem change concerns one verb only, namely  $\triangle$ ,  $\triangle$ ,  $\longrightarrow$  rd(y) "give." This verb exhibits forms with and without  $\longrightarrow$  r. Compare the two following forms.

$$rd(y).f \sim d(y).f$$

The contrast between absence and presence of > r is empirically undeniable.

**5.192** It is not clear why absence of r alternates with presence. Many verb forms favor either absence or presence. But alternation often occurs for no known reason within a single verb form.

### b. Diagnostic Value of ___ r

- **5.193** Three factors diminish the diagnostic value of absence or presence of r. This value also varies between verb forms.
  - (1) Irregularity of absence or presence of r: Many verb forms exhibit both absence and presence of r.
  - (2) Sufficiency for diagnostic purposes of other elements in the same verb form: In quite a few verb forms, absence or presence adds nothing to what other elements already tell us about the identity of the verb form.
  - (3) *Overlap in writing:* Verb forms may share their writing, including absence or presence of r, with other verb forms.
- **5.194** As an example of (1), the stative conjugation exhibits forms with r, such as rd(y).kw "I having being placed" and rd(y).tj "she having been placed," and forms without r, such as r,
- **5.195** In the following examples of (2), elements other than absence or presence of r fully identify a verb form. Absence is regular in dd, dd "who gives." The writing rdd does not exist. But then, gemination already sufficiently identifies the verb form. The absence of r does not add anything. Knowing of the absence is necessary to write the verb form correctly but not to identify it.

Presence of r is not regular in rd(y). n.tw.f as the writing of the verb form meaning "that he has been given." This verb form is also written without r. Anyhow, the two infixes n and tw already sufficiently identify the verb form. Absence or presence of r again contributes nothing towards identifying the verb form. In this case, this is just as well because neither absence nor presence even seem to be regular.

**5.196** Examples of (3) are verb forms in which absence or presence of r does play a diagnostic role, but the resulting writing is shared by more than one verb form. Thus, the absence of r is diagnostic in d(y). f as the writing of a verb form meaning "while he gives." But this is not the only verb form written d(y). f. So is the one meaning "may he give." Likewise, rd(y). f is diagnostic of certain verb forms written this way. The absence or presence is therefore diagnostic. But it does not identify a specific verb form. It only narrows down the choice of possible verb forms.

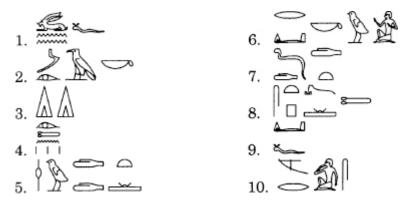
#### **QUESTIONS**

1. What is gemination? 2. In which two ways do geminating verb forms relate to the root? 3. Why is gemination not always diagnostically significant? 4. How does Type 1 gemination differ from Types 2 and 3? 5. How can gemination be relevant to verbs that never exhibit gemination through the principle of parallelism? 6. Which three factors influence the diagnostic relevance or value of absence or

presence of r in rd(y) "give"?

#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Transcribe and identify stem, inflection, and components described so far (gemination and absence or presence of r in rd(y)). For Type 1 gemination, also identify absence of gemination.



## LESSON 30 (§§ 5.197–219)

#### 3. "Weak" Consonants

**5.197** Some verb forms of some verbs display the following three endings:

(1)  $\sum_{i=1}^{\infty} w$  (also  $\mathcal{C}$ );

(2)  $\iiint jj$  (also  $\iint j$  in Old Egyptian);

(3)  $\iint tj$  (also  $\emptyset$ ) as feminine singular adjectival ending, instead of  $\triangle t$ .

 $\sum_{w \text{ and } M} jj$  appear before or after determinatives,  $M_{tj}$  "after."

**5.198** Examples are h3w.f "that he will descend" (from h3(y) "descend"), jrij.k "may you do," jrtj "that which will be done," and "that which we will do" (the last three verb forms from jr(y) "do").

- **5.199** The consonants transcribed *w*, *jj*, and *j* are called "weak" because they only rarely appear in verb forms that they otherwise characterize. It is as if they are "too weak" to appear all the time. In fact, the third weak consonant of third-weak verbs is written out so rarely that these verbs might easily be mistaken for biliteral verbs, as they in fact were in early Egyptology.
- **5.200** Nothing is more characteristic of "weak" consonants (in comparison to the other six component types) than their erratic appearance. Verb forms known to exhibit "weak" consonants only rarely exhibit them. And it is not known why "weak" consonants appear in writing when they do. By contrast, one expects to find most any other type of component to be always written out in verb

forms that have them as a characteristic. One exception is absence or presence of r in rd(y) "give" as a component type. r shares erratic appearance with "weak" consonants.

It is therefore normal for verb forms to be written mostly without a "weak" consonant and only on rare occasions with one. What follows are three declined verb forms of the two verbs ightarrow jr(y)

"do" and 2m = m33 "see," in two writings each. The writings to the left are more common.

Likewise, verb forms that can be written jrw.k and jrjj.k more often

than not appear in writing as  $\bigcirc$  jr.k.

**5.201** The reasons for the erratic appearance of "weak" consonants are not fully understood. Vowels, which cannot be seen, may have played a role. The possible role of vowels may be illustrated with a modern analogy. Consider English "doer" ("someone who does"). One might write it without

vowels as dr. But w is audible between o and e. One might therefore be tempted to write the word without vowels alternatively as dwr. The "weak" consonant w is a side-effect of the vowel sequence o plus e. The vowels explain its presence in dwr.

A full explanation for the erraticness of "weak" consonants requires a full theory of Middle Egyptian vowels. Such a theory exceeds what is immediately observable and therefore also the scope of this grammar.

Another problem is that "weak" consonants appear both in verbs ending in a "weak" consonant and in verbs that do not. In the latter, the "weak" consonant seems to have been added to the stem and not to be part of it. This distinction too would need to be considered in a full-scale theory.

- 5.202 w appears perhaps in about fifteen different verb forms, wij in perhaps about ten, and wit in perhaps three. Those with tj are future tense. A provisional list is found in Catalogue of Coordinates and Satellites of the Middle Egyptian Verb (1996). Details can be inferred from Chapter Six onwards, when the verb forms themselves will be introduced. It will be noted which verb forms occasionally exhibit "weak" consonants.
- **5.203** As in the case of gemination, restrictions apply. "Weak" consonants occur with some verbs or some verb classes and not with others. The restrictions differ from verb form to verb form. Details will be provided from Chapter Six onward.

### 4. Singular Substantival Endings

**5.204** The two singular substantival endings are absence of an ending in the masculine and c t in the feminine. These two endings are also one of the seven components. They appear mainly in the infinitive. A "masculine" infinitive is c d "to say." A "feminine" infinitive is c d "to go" (from c d "sd "sd

**5.205** The infinitive can be a verb form by itself. But it can also be part of a verb form. It is then mostly preceded by one of three prepositions, r, r, or r m. Prepositions as components are described below. Examples with r follow.



#### 5. Infixes

#### a. The Nine Infixes

- **5.207** Seven infixes are general and two are specific. In transcription, the seven general infixes will be separated from the stem by a dot in transcription, as in *stp.r.f*.
- **5.208** What distinguishes the two infixes written cappa and the two infixes written cappa cappa from one another? For the modern observer, the difference is in the relations these infixes entertain with other elements. What relations are is discussed below (§§ 5.237–58). If the verb forms in which these infixes appear were written out fully, including the vowels, we would have no need for these relations to define the verb form.

## b. Seven General and Two Special Infixes

	•
5.209	Seven of the nine infixes in principle occur with any verb. They are one infix written $c$ $t$ , one infix
	written $n$ , and the five infixes $r$ , $k3$ , $m$ $jn$ , $k$ $tw$ , and $ty$ . They may therefore be called general infixes.
5.210	The other two infixes, one of the two written $\triangle t$ and one of the two written $n$ , are special to one or two verbs. They may therefore be called special infixes.
5.211	The special infix $arrow t$ occurs in two verbs, namely $arrow fw(y)$ "come" and $arrow fw(y)$ "bring." The special infix $arrow n$ occurs in one verb, namely $arrow fw(y)$ "see"
5.212	The two special infixes in all probability denote just one verb form in these three verbs, and the same one at that. This verb form looks as follows in the three verbs:
	f, and $f$
	c. Relations to What Precedes and What Follows
	i. Relation to What Precedes
5.213	All the nine infixes are immediately preceded by the stem of the verb. An example is
	stp.k3.f "then he will choose," in which the stem
	immediately precedes the infix $k3$ .
5.214	There is one exception to this rule. One verb form featuring the general infix $n$ exhibits both declension by adjectival endings and suffix conjugation. In this verb form, declension precedes the
	infix $n$ and conjugation follows it. An example is the verb form $n$ and conjugation follows it. An example is the verb form $n$ , separating it from the stem, and the conjugation $n$ follows the infix $n$ .
5 01 F	
5.215	As regards spelling, most infixes follow the determinatives of the stem. Thus, the infix $k3$ follows the stem in $stp.k3.f$ "then he will choose." An exception is $stp.k3.f$
	, which usually precedes determinatives. Thus, $\triangle t$ precedes the determinative in $(\bigcirc)$
	(r) stp.t.f "(until) he chooses."
	ii. Relation to What Follows
5.216	The nine infixes are always followed by inflection. Eight infixes are always followed by the suffix conjugation. An example is $ty$ , is always followed by declension by third person suffix pronouns. An example is
	stp.ty.fy "he who will choose."

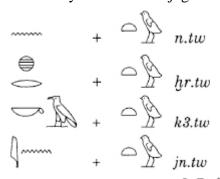
5.217 Like every suffix conjugation, suffix conjugations with infixes have two properties. First, suffix

262

pronouns alternate with other references to entities. Thus, f "he" and sn.j "my brother" alternate in stp.k3.f "then he will choose" and stp.k3.f "then my brother will choose." Second, references to entities other than suffix pronouns may be separated from the rest of the verb form by enclitic words, as by n.j "for me" in stp.k3 n.j sn.j "then my brother will choose for me."

#### d. Combinations of Infixes

**5.218** Four combinations occur, all followed by the suffix conjugation.



### 6. Prepositions

**5.219** Three prepositions used as components are r, r, and m. They immediately precede the stem. They do not retain their literal meaning ("on," "to[ward]," and "in").

#### **OUESTIONS**

1. Why are certain consonants called "weak" as verbal components? 2. Which are the three cases of "weak" consonants? 3. In which verb form are the two singular substantival endings used almost exclusively? 4. Which are the two types of infixes? 5. How do infixes relate to what precedes and what follows in verb forms? 6. Which three prepositions are used as verbal components?

#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Transcribe the following verb forms and identify stem, inflection, and any components described

thus far (gemination, absence or presence of r in rd(y) "give," "weak" consonants, singular substantival endings, infixes, and prepositions).

- 1.
- 2. 0
- 3.
- 4. ..... \$ 20 20
- 5. DAB
- 11.
- 12.
- 13.
- 14.
- 15. 2 1 1 1

- 6.
- 7.
- 8.
- 9.
- 10.
- 17. 之》 [ ] 图益
- 18.
- 19.
- 20.

## LESSON 31 (§§ 5.220–35)

#### 7. Auxiliaries

#### a. Definition

**5.220** The auxiliaries are all those verbal components that *precede* the stem, except the three prepositions listed as a separate component type in § 5.219.

#### b. Separability from the Stem

**5.221** Prepositions and auxiliaries both precede the stem. But whereas prepositions *immediately* precede, most auxiliaries can be *separated* from the stem by enclitic particles. Thus, the auxiliary jw is separated from the stem jr by the enclitic particle grt in jw jw grt jw grt jr jw grt jr jw grt grt

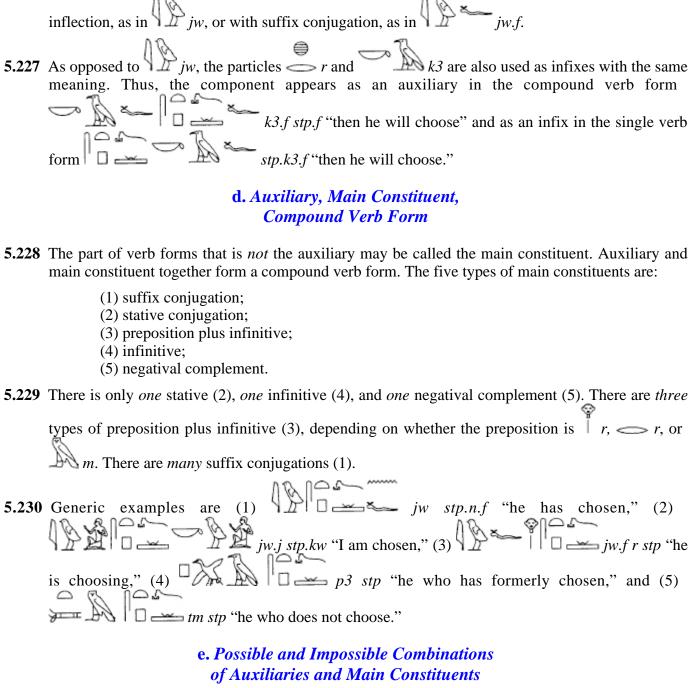
#### c. Verbal and Non-verbal Auxiliaries

#### i. Verbal Auxiliaries

- **5.223** Less often, verbal auxiliaries are derived from jr(y) "do." But after Middle Egyptian, jr(y) became the most common auxiliary. The verb p3 "do in the past" is used only as a verbal auxiliary.
- 5.224 Among the verbal auxiliaries are also the negation verbs f(m), f(m)
- 5.225 Occasionally, auxiliaries are also derived from yet other verbs such as sr "lie (down)," pr(y) "go out," jj(y) "come," and r "finish (doing something)." Most exhibit the infix …… n, as in sr.n "in the evening (someone did something)."

#### ii. Non-verbal Auxiliaries

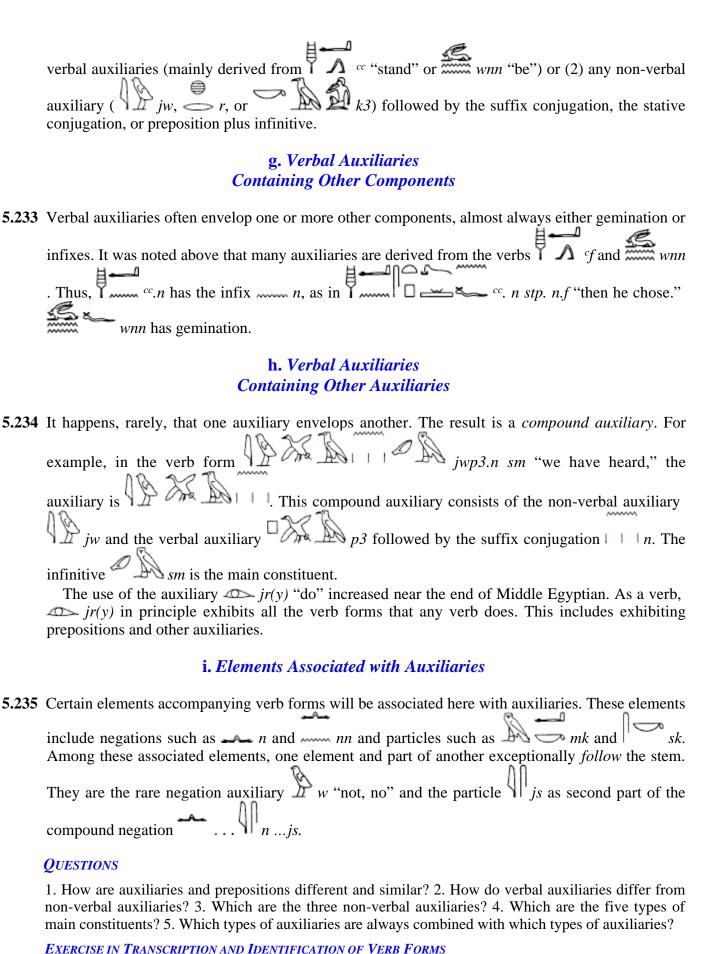
5.226 Like the verbal auxiliaries, the following three auxiliaries probably derive from verbs. But this origin is no longer patently obvious. The auxiliaries will therefore be called nonverbal. They are jw, jw, r, and r k3, also written r k3. They appear either without



**5.231** Not every auxiliary can be combined with every main constituent. Many thinkable combinations do not exist. Listing all the existing and non-existing combinations would be a task of considerable magnitude. Such a list would be useful, but it exceeds the scope of the present work. It is nevertheless possible to make a few general statements as to which auxiliaries can combine with which main constituents. Such general statements follow in the next section.

#### f. General Combinations of Auxiliaries and Main Constituents

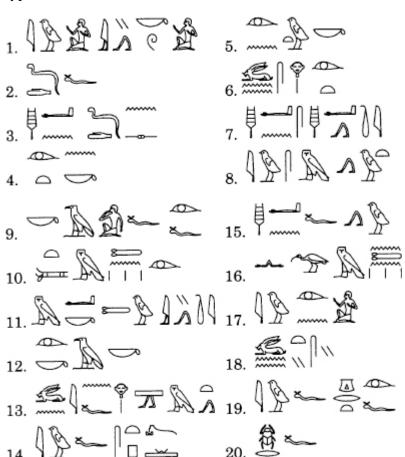
5.232 The negatival complement as main constituent occurs as a rule with negation verbs (§ 5.224). The infinitive as main constituent occurs only regularly with the two verbal auxiliaries  $\infty$  ir(y) "do" p3 "do in the past." The majority of combinations consists of either (1) any other



EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Transcribe the following verb forms and identify stem, inflection, and any of the seven component

types.



## LESSON 32 (§§ 5.236-66)

#### 8. Double Appearance of a Component

5.236 Because auxiliaries can envelop other components (§ 5.233), a component can on occasion appear both in the auxiliary and in the main constituent. For example, in the verb form both in the auxiliary are cc.n stp.n.f "then he chose," the component cc.n appears both in the auxiliary <math>cc.n appears both in the auxiliary <math>cc.n appears both in the auxiliary are <math>cc.n appears both in the auxiliary are <math>cc.n appears both in the auxiliary appears both in the auxiliary are <math>cc.n appears both in the auxiliary appears both in the auxiliary are <math>cc.n appears both in the auxiliary appears between appears are appears app

## 9. Relations as Empirical Substitutes for Unobservable Components

## a. Incomplete Writings of Verb Forms as a Diagnostic Handicap

5.237 What can be seen of verb forms is stem, inflection, and components. This is less information than is needed to identify every verb form unambiguously. Components such as vowels, which presumably contributed much to distinguishing between verb forms, are not written. Thus, stp.f is in all probability a writing for many different verb forms. The deficiency of hieroglyphic writing has an awkward effect. The verbal system is deceptively easy to learn at the outset. There is less to memorize than in most other languages. But this benefit melts as snow in the sun when one begins reading texts. Suddenly, verb forms become a source of much frustration. Many verb forms cannot be identified with certainty because a lack of sufficient criteria makes a definitive identification impossible.

### b. Relations of Components with Other Elements

**5.238** Besides the components, something else is observable that can be used to make reasonable statements about verb forms, namely the relations of components with other elements. These relations are arrangements or features of organization. They exist between the elements of a verb form and between the verb form and what is outside itself.

## c. Relations of Juxtaposition and Substitution

**5.239** There are two basic types of relations between elements. Two elements may appear simultaneously in one another's vicinity in the chain of speech. The two elements are then in a relation of juxtaposition. Alternatively, the second element may replace the first element in the same environment. The two elements are then in a relation of substitution.

### d. Empirical Character of Relations of Juxtaposition and Substitution

- **5.240** Relations between elements are undeniable empirical facts. But as features of organization, relations present themselves differently to the observer than the elements themselves. This may be illustrated by pointing to the role of relations outside language.
- **5.241** Relations are not only important in language. They affect all aspects of daily life. Consider two chairs standing in a room. The chairs are elements. They are directly observable. One can see and

touch them. But the relations between the chairs can also be observed. The chairs can assume positions in relation to one another. These are relations of juxtaposition. These relations are observable. But they cannot be seen or touched in the way that the chairs themselves can. Let us further assume that one chair is removed and another element is put in its place, say a lamp. The relation between chair and lamp is also a relation. It is a relation of substitution.

Observing a relation of substitution differs from observing a relation of juxtaposition. A single observation at one point in time suffices to see two chairs standing in a room. But two observations made at different times are necessary to observe that the lamp has taken the chair's place.

Relations of juxtaposition and substitution are part of every day life. We use them constantly in engaging the world around us. They allow us to be aware of the fact that two chairs have been moved more closely to another or that one chair has been replaced by another element.

### e. Exploitation for the Purpose of Diagnosis of Visible Relations between Elements when the Elements Themselves Are Partially Invisible

- **5.242** The relevance of relations is as undeniable in language as it is in our perception of the physical world. After all, no one can deny that the elements of language appear next to one another in succession in the chain of speech. Nor can it be doubted that a given element can conceivably be replaced by some elements but not by others. In "Then the king spoke," "king" can be replaced by "queen," but not by "royally."
- **5.243** An explicit list of all the possible relations of juxtaposition and substitution is ultimately indispensable for a full understanding of any language. Middle Egyptian is no exception. But the task of compiling such a list would be enormous. This task exceeds the scope of the present work.

Narrowly and explicitly focusing on relations may seem like an abstract exercise and its usefulness may be called into question. Under any normal circumstances, the usefulness of the exercise is limited for the practical purpose of learning a language. But Middle Egyptian is not normal circumstances. Relations have always played a crucial role in the analysis of Middle Egyptian verb forms. Relations are used constantly by grammarians to propose identifications of verb forms. But again, we would have no need for relations if every verb form were fully visible in hieroglyphic writing.

**5.244** How are relations exploited to suggest identifications of verb forms? The best answer to this abstract question is a concrete example. In the examples in the next section, two verb forms are defined, not by any visible elements that they exhibit, but by relations between elements only.

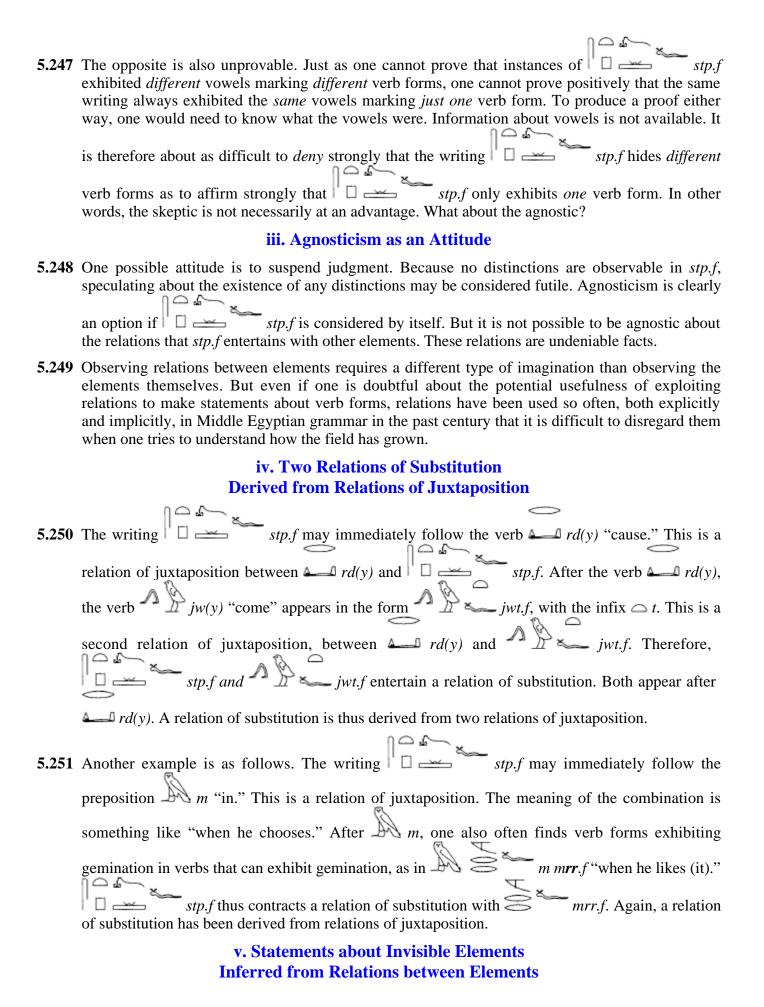
## f. Proposing Identifications of Verb Forms by means of Visible Relations between Elements

#### i. Lack of Visible Elements

5.245 It is very common to find verb forms in Middle Egyptian texts of which we can only see the stem and inflection, as in stp.f. All that is visible in this writing is the stem and the suffix conjugation to stp.f. This is not much. Yet such cases account for a large portion of the verb forms in any text.

### ii. Skepticism as an Attitude

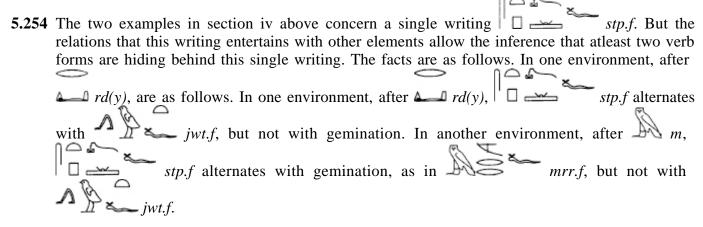
**5.246** It is now generally assumed that a writing like stp.f hides several different verb forms. Presumably, these different verb forms were distinguished by such unwritten features as vowels. But this cannot be positively proven.



- **5.252** The relations of juxtaposition and substitution in the two examples above are undeniable *facts*. These facts are so striking that they can hardly escape attention. However, observations about relations are not direct observations of elements. They have a certain abstract quality.
- **5.253** The question arises: What can be inferred from relations between elements about the elements themselves?

First, only *inferences* about elements, not other facts, can be derived from relations between elements. Facts are by definition directly observable. Inferences are not.

Second, these inferences cannot be proven absolutely. But they ought at least to meet two verifiable conditions. First, the manner in which they are obtained ought to be fully transparent and reasonable. Second, even if inferences are not facts themselves, they ought preferably to be derived immediately from a demonstrable fact such as a relation, and not from another inference.



#### vi. Two Reasonable Assumptions

- 5.255 It has been inferred above that there are at least two verb forms written  $\frac{1}{2} = \frac{stp.f.}{stp.f.}$  This inference can be buttressed by two reasonable assumptions. First, it is reasonable to assume that different verb forms are used in different environments. This is the case in every language. The fact that gemination appears after  $\frac{1}{2} m$  "in" (see section v), but not after  $\frac{1}{2} m = \frac{1}{2} rd(y)$  "cause" (see above), supports this assumption.

#### vii. Defining Verb Forms by means of Relations

5.257 How can the two different verb forms  $\Box$   $\Longrightarrow$  stp.f, whose existence was inferred above from certain relations of juxtaposition and substitution, be defined? Short definitions are not possible. One verb form can be defined as the verb form that follows  $\frown$  rd(y) "cause," alternating with  $\frown$  jwt.f. The other can be defined as the verb form that follows the

preposition m "in," alternating with geminating forms such as mrr.f. These definitions are complicated. But the available facts allow no abbreviation. The existence of the two verb forms is an inference. The definitions necessarily reflect how the inference was obtained.

## viii. Diagnosing General Verb Forms and Specific Verb Forms by means of Relations

**5.258** In the analysis of Middle Egyptian verb forms, relations with other elements have been exploited in two distinct types of diagnostic endeavor: first, to propose the existence of generic verb forms; second, to identify specific verb forms in texts.

Each specific verb form in a text is a concrete manifestation of a generic verb form. The set of generic verb forms is strictly limited. The set of specific verb forms is infinite. Each generic verb form can potentially be represented by an infinite number of specific verb forms in texts. The generic verb forms of Middle Egyptian have probably all been identified by now. By contrast, many specific verb forms in texts cannot be identified with certainty. That is, they cannot be identified securely with one of the generic verb forms, which are presumably all known by now. In the beginning, the generic verb forms were themselves identified by observing specific verb forms. Once identified, the generic verb forms became a tool used to propose identifications for specific verb forms in texts.

## 10. Too Many or Too Few Visible Components for Diagnosis

**5.259** To identify a verb form, one must rely first and foremost on what one can see of it. Relations with other elements are a subsidiary tool for identifying verb form (see section 9 above). Three types of items are accessible to observation in verb forms.

Dimension	Name of Item Type	Number of Items per Type in a Verb Form
1	stem	one (1)
3	inflectional ending	from none to three $(0 \longrightarrow 3)$
4	visible component	from none to seven $(0 \longrightarrow 7)$

No verb form appears to exhibit the maximum of eleven (1 + 3 + 7) visible items.

- **5.260** As tidbits of sound pattern, the visible components of Dimension **4** are inextricably linked to tidbits of concept in Dimensions **5**, **6**, **7**, and **8**. However, *more* or *fewer* components may be visible than are needed for an identification. One might say that there are then *too many* or *too few* visible components.
- **5.261** An example of a verb form in which there are *too many* components is jr.n.f. This verb form exhibits two visible components. The first is absence of gemination in the stem jr, as
  - opposed to its presence in jrr. The second is the infix m n. It is a fact that the infix m is as a rule is the infix m n. It is a fact that the infix m n is as a rule accompanied by absence of gemination. The effect is that absence of gemination is superfluous for identifying the verb form. The infix m n suffices for this purpose.
- **5.262** Listing every instance in which a component is superfluous would be a considerable undertaking, if at all doable. It amounts to reconstructing how the mind works in analyzing Egyptian verb forms. Yet ideally, a final understanding of Middle Egyptian (complete to the extent that hieroglyphic writing allows it) needs to include such a list.

5.263	Because hieroglyphic writing is defective, there are many more instances in which not enough
	visible components are available to identify a verb form securely. These instances are also too
	numerous for the purpose of providing a list. Thus, there is in all probability more than one verb
	form hidden in the writings $\square$ $\longrightarrow$ $stp.f$ and $\square$ $\longrightarrow$ $stp. n.f$ . What is visible in
	these two writings does not allow identifying a generic verb form or a specific verb form
	unambiguously. Relations need to be used (see section 9) to make plausible statements about these
	writings, whether they are interpreted as generic verb forms or as specific verb forms.

## 11. Stem and Inflection as Substitute Information about Dimensions 5 to 8

- **5.264** Dimensions **5**, **6**, **7**, and **8** ought to be completely identifiable by observing the components in Dimension **4**. However, hieroglyphic writing does not represent all the components. Vowels, for example, are not written. As a result, the two other visible types of elements may on occasion provide information about Dimensions **5**, **6**, **7**, and **8**. They are the *stem* (Dimension **1**) and *inflection* (Dimension **3**). These two dimensions are only substitute information, however. If verb forms had been fully written, neither stem nor inflection would be needed to identify a verb form.
- 5.265 An example in which the *stem* provides information about Dimension 8 is as follows.

  | Stp.n.f is presumably a writing of more than one verb form. This writing consists of three parts, the stem | Stp, the infix | n, and the inflection | f. The stem stp, which is Dimension 1, as a rule conveys information about Dimension 2. In this case, it appears that the verb | stp is transitive in Dimension 2. This means that no conclusion is possible about Dimension 8. But in | sm.n.f, the verb | sm.n.f, the

#### **QUESTIONS**

1. If a component occurs twice in a single verb form, in which two locations does that component appear? 2. Which are the two main types of relations? 3. How does the empirical character of relations differ from the empirical character of facts? 4. How can identifications for verb forms be proposed by means of relations between elements rather than by means of the elements themselves? 5. On which two reasonable assumptions do many inferred identifications of verb forms rest? 6. What is an instance in which there are "too many" components for the purpose of identifying a verb form?

### LESSON 33 (§§ 5.267–86)

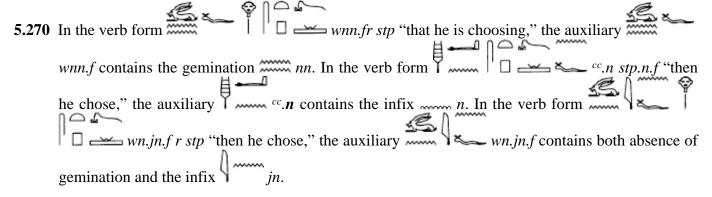
## 12. The Organization of Components: Survey of Sections 13 to 16

- **5.267** Components are organized in many different ways in verb forms. Providing a complete account would be an enormous task. No attempt will be made here. What follows is a partial account. Sections **13**, **14**, **15**, and **16** present four ways of looking at how components are organized.
- **5.268** Section **13** concerns the fact that one component may *encompass* another. Section **14** revolves around the criterion of *number*. Various ways of counting components are considered. Section **15** concerns the *location* of components. Various ways of describing the position of components in relation to one another are described. Section **16** deals with various ways in which components are *combined*.

Other aspects of organization will not be discussed here. For example, one might also describe *number of components by location*, that is, combine the two features of number and location.

### 13. Components Encompassing Components

5.269	This feature of organization is exclusive of auxiliaries. It has also been discussed under aux	kiliaries
	above (§§ 5.233-34). By far the most common cases are those in which auxiliaries enc	ompass
	gemination or infixes, or both.	



## **14. Counting Components**

## a. Counting Regardless of Type

5.271	The simplest count involves the number of components regardless of type or of number per type.
	Verb forms exhibit zero, one, two, three, four, five, six, or seven components, apparently never
	more. An auxiliary often envelops another component. This is apparently always the case when a verb form has more than four components.

5.272	Examples are as follows. The translations are one of many possible. No components appear in
	$stp.f$ a writing of many different verb forms. All one can see is the stem $\square$
	stp and the inflection f. One component occurs in jrr.f "that he does," gemination
	Srr. Two occur in jw.f m33.f "he sees," the auxiliary
	iw and the gemination 33. Three components occur in 1 iw.f.

r šmt "he is going," namely the auxiliary jw, the preposition r, and the singular substantival ending  $\triangle t$ . Four components occur in ...... he chose," namely the auxiliary wn.jn, absence of gemination in .... *jn*, and the *preposition*  $\mid r$ . Five components occur in wn.jn, absence of gemination in wn.jn.f r šmt "then he went," namely the auxiliary r, and the singular substantival ending  $\triangle$  t. Six *jn*, the *preposition* wn.in.f r int "then he brought": the auxiliary components occur in wn.in, absence of gemination in the infix wn, the infix r, absence of gemination in  $\lim_{n \to \infty} jn$ , and the singular substantival ending cap t. Seven occur in  $\triangle$  wn.in.f r d(y)t "then he gave": the auxiliary absence of gemination in  $\triangle$  d(y)t, and the singular substantival ending  $\triangle t$ .

#### b. Counting in light of Type

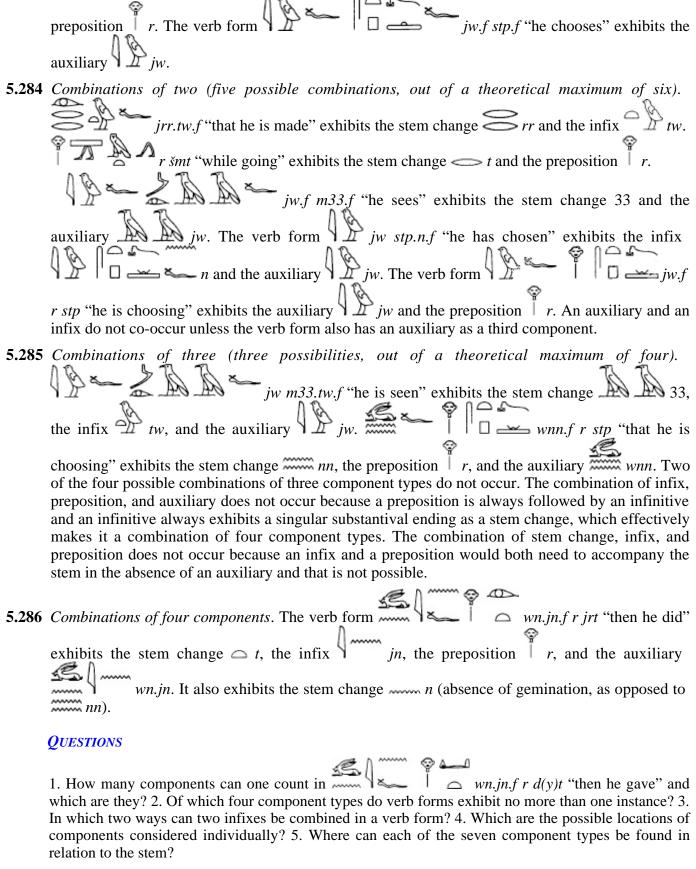
- **5.273** Entering the criterion of type makes the count more sophisticated. One can count how many component types a verb form exhibits or how many components it exhibits per type.
- **5.274** Without entering into detail, verb forms mostly do not contain more than one component per type. In fact, verb forms never contain more than one instance of absence or presence of content one singular substantival ending, one preposition, or one auxiliary. That is, they exhibit one or none.
- 5.275 By contrast, verb forms can contain zero, one, or two instances of (1) gemination and zero, one, or two (5) infixes. When a verb form exhibits two instances of gemination (presence or absence), auxiliary and stem exhibit one instance each, as in wnn.f r jnt "that he is bringing," in which wnn.f exhibits presence of gemination and jnt absence. When a verb form exhibits two infixes, there are two possibilities. The auxiliary and stem exhibit one each, as in stp.n.f "then he chose." Or the stem exhibits two, as in stp.n.tw.f "that he was chosen."

## 15. Location of Components

#### a. Regardless of Type

- **5.276** Considered individually, components can be found in three locations in relation to the stem: (1) distinctly *preceding* the stem, (2) distinctly *following* the stem, and (3) appearing *in* the stem.
- 5.277 Considered collectively, two or all three of these three positions can apply together. Thus,

	A Th
	components can both precede and follow the stem. For example, in the verb form $jw$ $jw$ $jw$ $jw$ precedes the stem $jw$ $jw$ and the infix $jw$ $jw$ follows it. The same applies to inflection. It can both precede and follow the stem, as $jw$ $jw$ $jw$ $jw$ $jw$ $jw$ $jw$ $jw$
	in $\int I \int $
	b. Location of Components per Type
5.278	The seven visible component types are found in different positions in relation to the stem.
	Beginning from the beginning, auxiliaries precede the stem, as $\int_{-\infty}^{\infty} jw$ does in
	by an enclitic word, as by $grt$ in $grt$ in $grt$ in $grt$
	of an elicitic word, as by a gri in a gri sipinity i repositions arways
	immediately precede the stem, as in $\sqrt{D}$ $jw.f r stp$ "he is choosing." Absence
	or presence of $r$ in $rd(y)$ "give" is part of the stem, appearing in the beginning of the
	stem. Gemination is also part of the stem, appearing towards the end, as injrr.f "that he does." "Weak" consonants are best described as appearing at the end of the stem, as in
	<i>jrjj.f</i> "may he do." It is not always clear whether they do or do not belong to the stem. Finally, singular substantival endings and infixes both distinctly follow the stem.
5.279	The location of the two invisible component types can also be defined. Unobservable components, such as vowels, presumably occur <i>anywhere</i> in the stem. Absence or presence of a pause is the <i>very first</i> element in any verb form.
	16. Combinations of Components
5.280	Components combine in many different ways in verb forms. On the one hand, not all thinkable combinations exist. On the other hand, the combinations that do exist are so numerous that a complete classification will not be attempted here, even if such a thing might be useful. What does exist can be inferred from the description of verb forms from Chapter Six onward.
5.281	Rules can also be formulated about combinations that are not possible. For example, an infix and a preposition only co-occur in a verb form if it also exhibits an auxiliary. The result is a combination of <i>at least three</i> components: auxiliary, preposition, and infix.
5.282	What follows is just one way of classifying verb forms. The number and kinds of types are counted. For the purposes of this classification, four of the seven component types have been joined into a single one, called stem changes. These four component types are gemination, absence or presence
	of $r$ in $r$ $rd(y)$ , "weak" consonants, and singular substantival endings.
5.283	Combinations of one component (four possible combinations). The verb form $fr.f$ "that he does" exhibits the stem change $fr.f$ "that he has chosen" exhibits the infix $fr.f$ "that he has chosen" exhibits the infix $fr.f$ "that he has $fr.f$ "while choosing" exhibits the
	he does" exhibits the stem change $rr$ . The verb form $\square rr$ stp. n.f "that he has
	chosen" exhibits the infix $n$ . The verb form $  \cdot   \cdot   = r$ stp "while choosing" exhibits the



#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Transcribe the following verb forms and describe (a) the number of components per type and (b) the location of the components in relation to the stem.





## LESSON 34 (§§ 5.287–319)

#### 17. Spaces in Verb Forms

#### a. Disruptions of a Verb Form's Continuity

- **5.287** All we can see of a verb form is (1) the *stem*, (2) up to *three inflectional endings*, and (3) up to *seven components*. These three types of elements are all elements of sound pattern. Concepts cannot be seen. Concepts are linked to or conveyed by sound pattern. Now that all the three types of elements have been introduced and described at some length, the time is right to describe another remarkable property of verb forms, the fact that they can be disrupted by extraneous elements.
- **5.288** A verb form appears to the eye as a stretch of sound pattern with a beginning and an end. But this stretch of sound pattern is not always continuous from beginning to end. A verb form can be disrupted by a limited set of elements that do not belong to the verb form. These foreign elements do not always disrupt verb forms, but when they do, they do so at well defined locations. At each such location, one may think of the existence of a space, even when the space is not filled and therefore invisible. Extraneous elements appearing in such a space inside verb forms often separate an auxiliary as a verbal component from the stem. It is therefore opportune to introduce the existence of these spaces here in connection with the treatment of components.
- **5.289** In short, a space in a verb form is a well-defined location where a verb form can open up to allow an extraneous element to intervene. In that space, elements may or may not appear. Such spaces also exist outside verb forms.
- 5.290 In generic jw.f stp.f "he chooses," the existence of an invisible space is marked by . This space becomes visible when an element fills it. Thus, when the verb form appears at the beginning of a sentence and the sentence contains the enclitic particle grt, that enclitic particle cannot come at the beginning of the sentence. It must occupy the first available space. The resulting order is jw.f grt stp.f, not

**5.291** The locations of these spaces have never been fully catalogued. Compiling such a catalogue exceeds the scope of this grammar. What follows are a few general observations regarding these spaces and what fills them.

#### b. Understanding Unfilled Spaces as Absences

**5.292** A space's existence is revealed when the space is filled by an element. But the space exists even when it is not filled. When not filled, it may be thought of as an absence. However, it is not a significant absence. We have encountered significant absences. An example is the masculine

singular ending in  $\bigcirc$  nfr "good one (masculine)." This absence contrasts with the presence of the feminine singular ending  $\bigcirc$  t in  $\bigcirc$  nfrt "good one (feminine)." In this case, the meaning of absence of an ending is as specific as the meaning of presence of an ending. In other words, the absence is attached to a concept.

By contrast, as absences, spaces have no specific meaning. They are places where other words may appear. They are not attached to a concept side.

#### c. The Enclitic Character of the Space Fillers

- **5.293** Words that fill spaces in verb forms may be called space fillers. These space fillers are all enclitic. Spaces and enclitic words are therefore like two sides of a coin. On the one hand, spaces can be filled by enclitic words. On the other hand, wherever an enclitic word could appear, one can think of the presence of a space.
- **5.294** The positions of enclitic words in the sentence vary. Yet these positions all obey a single general principle. Enclitic words appear *as early as possible in a sentence without being the first word*. "As early as possible" means "in the first available space." This first space may or may not occur inside a verb form. Only cases in which it does are of direct concern in the present chapter.
- **5.295** Some enclitic words cannot appear as far forward in the sentence as other enclitic words. These differences between enclitic words are discussed in section e below.

#### d. The Two Types of Space Fillers: Enclitic Particles and Enclitic Pronouns

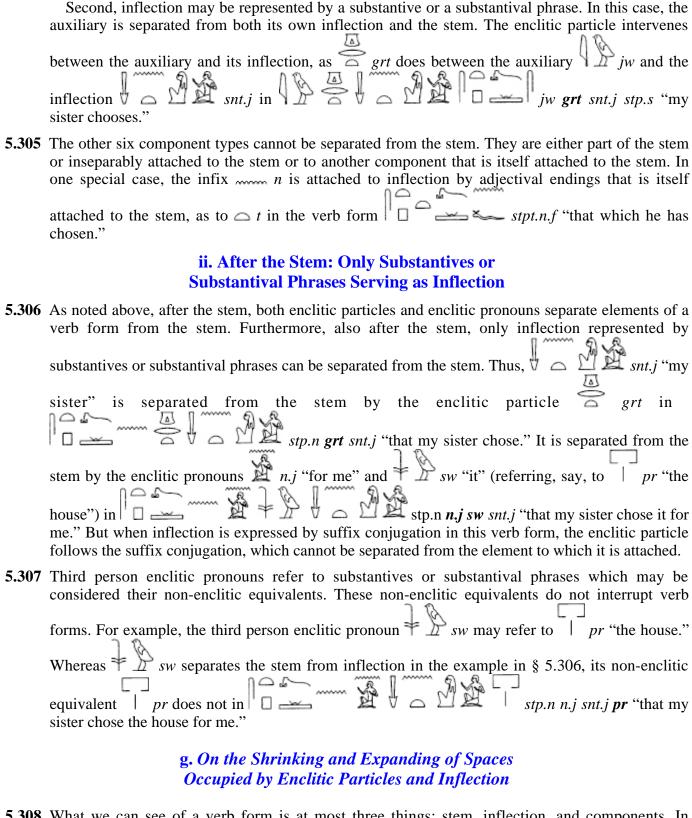
- **5.296** There are two types of enclitic words. Accordingly, there are two types of space fillers. The first type consists of enclitic *particles*, such as rf and grt. The second type consists of enclitic *pronouns*.
- Dependent pronouns can also express conjugation, as in the generic verb form  $mk \ sw \ r \ stp$  "he is choosing." As conjugation, dependent pronouns are better regarded as part of a verb form rather than as an extraneous element serving as a space filler. This chapter is concerned only with extraneous elements interrupting verb forms. As suffix conjugation, dependent pronouns can be separated from the stem by enclitic particles, as in generic  $mk \ sw \ m \ stp.f$  "he chooses."

e. The Two Main Locations of Spaces and Which Types of Space Fillers Fill Them

i. The Two Locations: Preceding the Stem and Following the Stem

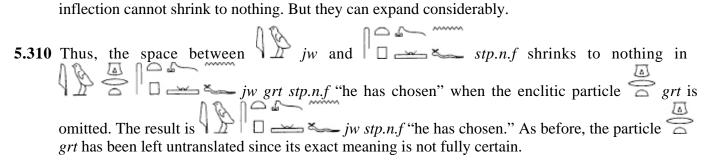
	example, the enclitic particle $grt$ fills the space that exists between $grt$
	chosen." The second location is after the stem. An example is $agrt$ in $agrt$
	The Transport Space Fillers Filling the Trans Legations
<b>=</b> 200	ii. The Types of Space Fillers Filling the Two Locations
5.300	There are two types of space fillers, enclitic particles and enclitic pronouns. Their locations inside verb forms differ. Enclitic particles interrupt verb forms both before and after the stem, as in the examples in § 5.299 above. Enclitic pronouns interrupt verb forms only after the stem, as in stp.n n.j sw snt.j "that my sister has chosen him for
	me." Note that the preposition $n$ plus suffix pronoun, in this case $n.j$ "for me," precedes
	dependent pronouns, in this case sw "him," when both occur together.  In other words, before the stem, only enclitic particles interrupt a verb form. After the stem, both enclitic particles and enclitic pronouns interrupt verb forms. It remains to be examined which elements of a verb form enclitic words separate from the stem of the verb form.
	f. Types of Elements Separated from the Stem by Words Filling Spaces
5.301	A filler occupying a space inside a verb form separates the stem of the verb form from other elements of the verb form. Verb forms exhibit only two other types of elements besides the stem, namely inflection and components. It follows that space fillers must separate either inflection or components from the stem. In fact, they can separate both from the stem. But not every kind of inflection and every kind of component and not in every location. In specifying which kinds of elements can be separated and which not, it will be useful to distinguish again between the two main positions, before and after the stem.
	i. Before the Stem: Only Auxiliaries without Inflection and Auxiliaries with or without Their Inflection
5.302	Only enclitic particles interrupt verb forms before the stem. Also, they interrupt only one component type before the stem, auxiliaries, with or without their inflection. As a rule, there is a space between auxiliary and stem. When enclitic particles appear, they separate auxiliary and stem.
<i>5</i> 202	
5.303	Two further distinctions are necessary when an auxiliary is split from the stem. First, the auxiliary does or does not exhibit inflection. When not, the entire auxiliary is separated from the stem, as in $j = j = j = j = j = j = j = j = j = j $
	does or does not exhibit inflection. When not, the entire auxiliary is separated from the stem, as in <i>jw grt stp.n.f.</i> When the auxiliary does exhibit inflection, a second distinction is necessary. First, the inflection may denote only person, gender, and number or only person and number. In this case, both
	does or does not exhibit inflection. When not, the entire auxiliary is separated from the stem, as in jw grt stp.n.f.  When the auxiliary does exhibit inflection, a second distinction is necessary. First, the inflection

5.299 Two main locations of spaces may be distinguished. The first location is before the stem. For

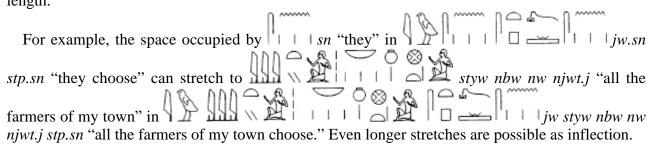


- **5.308** What we can see of a verb form is at most three things: stem, inflection, and components. In addition, extraneous enclitic elements may interrupt a verb form's sound pattern. These foreign elements separate the stem from auxiliaries, which precede, and from inflection that follows.
- **5.309** One property of spaces occupied by enclitic particles inside verb forms is worth noting. This property sets apart these spaces from spaces occupied by inflection between auxiliary and stem. The property concerns the sizes of the spaces. Both types of spaces vary in size. They can shrink and expand. But there is a difference. Spaces occupied by enclitic particles can shrink to nothing

when the enclitic particle is not used. As a result, the space becomes invisible. Spaces occupied by inflection cannot shrink to nothing. But they can expand considerably.



**5.311** Enclitic particles are both extraneous and occasional. By contrast, inflection is part of a verb form and cannot disappear. It cannot shrink to nothing. But it can expand considerably. This happens when inflection by suffix or dependent pronouns alternates with a reference to an entity of greater length.



## 18. Absences of Components and Absences as Components

- **5.312** In language, even nothing is important. But talking about nothing is not easy. Nothing has a certain abstract quality. We cannot see directly that which we are talking about. Yet the importance of nothing is undeniable. Moreover, nothing does have an empirical quality, even if only indirectly. Nothing has this same quality in all aspects of every day life. For example, I may come into a room and notice that something is missing that was there before. The absence of something is a fact of observation.
- **5.313** Absences are also significant when it comes to diagnosing verb forms. Some absences may be considered components themselves. Other absences are not components but they may nonetheless be relevant to identifying verb forms. The difference between absences *as* components and absence *of* components may be illustrated by an example.

Consider the masculine singular substantival ending as a marker of the infinitive d "to say." This is an example of absence functioning as a component. But then, by the same token, the verb form d does not exhibit any of the many other components. All the other components are absent. These are absences of components. The fact that a verb form does not have a certain component may contribute to its definition. Listing every component a given verb form does not have is cumbersome, but a general awareness of what verb forms do not exhibit is useful.

**5.314** Absence, or nothing, is not a monolith. There are different kinds of nothing. Talking about nothing is difficult enough. Talking about different kinds of nothing is even less easy. What follows are two illustrations of the diversity of nothing. First, there are *degrees* of sharpness in absence. Second, a single absence can have *different* meanings.

## a. Two Conditions Adding Sharpness to Absence

**5.315** Measuring degrees of sharpness in absence is difficult. But then, such degrees do exist. Thus, in

- $\square$  stp, absence may denote the masculine singular adjectival ending. This specific absence is well-defined and sharp. It derives its sharpness from at least two facts. First, the absence is opposed to a limited set of presences. This limited set includes the feminine singular ending t and the plural ending t. Second, the members of this limited set alternate with one another in a well-defined context that remains unchanged.
- **5.316** Much else is also absent in *stp*. But these other absences are less sharply defined. Absences increase in sharpness the more two intertwined conditions are fulfilled. First, the presences to which the absences are opposed can be defined more sharply and more narrowly. Second, the conditions within which these absences alternate with presences can be defined more sharply and more narrowly.

An absence is nothing. It cannot be defined by itself alone. It gains definition and sharpness only by how it relates to presences. These presences are of two main types. Presences either appear *instead of* absences or they appear *alongside of* it.

#### b. A Single Absence with Different Functions

**5.317** One single absence can have several different functions. Consider  $\square$  stp. This is a writing of at least three different verb forms. In each verb form, absence has a different function. Absence can mark inflection, either conjugation or declension, or a component.

First, absence can signal the masculine singular adjectival ending as an inflectional ending. Second, absence can signal the third masculine singular ending of the stative conjugation as an inflectional ending. Third, absence can signal the singular substantival ending as a verbal component (§ 5.204).

**5.318** In cases one and two, absence is opposed to a well-defined set of inflectional endings as presences. The two sets are the set of adjectival endings and the set of stative conjugation endings. The members of these two sets alternate with one another in conditions that remain unaltered. Absence is a member of both sets.

In case three, absence can be opposed to other presences only by changing the conditions, that is, by assuming that  $\Box$   $\Longrightarrow$  stp is no longer the infinitive.

## 19. Concluding Illustration of the Difference between Fact and Inference

**5.319** Different verb forms are often written alike, causing much difficulty in interpretation. For example,

int.f can represent seven different verb forms. The element interior t may denote:

#### A. AS INFLECTION

1. (§ 5.124) the feminine singular adjectival ending  $\triangle t$ 

*jnt.f* "that which he will bring"

#### **B.** AS COMPONENTS

2. (§ 5.204) the singular substantival ending  $\triangle t$ 

*int.f* "his bringing, the bringing of him"

3. (§ 5.209) the infix  $\triangle t$  occurring after the negation A = n

(active) *n jn.t.f* "he has not yet brought"

4. (§ 5.209) the same passive (rare)

*n jn.t.f* "he has not yet been brought"

5. (§ 5.209) the infix tw abbreviated

*jn.t(w).f* "*may* he be brought"

6. (§ 5.209) the infix \ ty abbreviated

"who will bring"

7. (§§ 5.209–11) the infix 
$$\triangle t$$
 special to  $jn(y)$  "bring" and  $jw(y)$  "come"  $jnt.f$  "so that he might bring"

The visible *facts* are the same for all the seven verb forms. The identification of verb forms is based on inference. It may be assumed that the verb forms were pronounced differently.

#### **QUESTIONS**

1. What are spaces in a verb form? 2. Which are the two types of space fillers? 3. When are dependent pronouns best not regarded as space fillers? 4. Which are the two main locations of space fillers in relation to the stem and by which types are both locations filled? 5. Which kinds of elements of verb forms are separated from the stem by space fillers, both before and after the stem? 6. How do spaces occupied by enclitic particles differ from spaces occupied by inflection between auxiliary and stem? 7. What is the difference between absence *as* a component and absence *of* a component? 8. By which conditions do absences gain sharpness of definition? 9. How can the same absence have different functions?

#### EXERCISE IN TRANSCRIPTION OF VERB FORMS AND IN LOCATION OF SPACES IN THEM

Transcribe the following verb forms and discuss the location of spaces in them, if any.

- 5.
- 6. 12 = 12 2
- 7. 哈二是登金
- 金面《红一二二司号》。8
- 金面《全金……二司号》。

### LESSON 35 (§§ 5.320-46)

# V THE FIFTH DIMENSION: NEGATION

#### **Coordinates**

- 1. absence of a negation word (affirmative verb form)
- 2. presence of a negation word (negated verb form)

#### 1. Dimensions 4 and 5 to 8

5.320 Language consists of links between sound patterns and concepts. Sound pattern and concept are like two sides of a coin. On the whole, Dimension 4 is one side of a coin of which Dimensions 5, 6, 7, and 8 are the other. Inevitably, the two sides need to be described separately. But the sides by themselves are not language. Dimension 4 is not language. Nor are Dimensions 5, 6, 7, or 8. Only the links between dimensions are language. Dimensions 5 to 8 are concepts. Their links with sound patterns in Dimension 4 are language.

#### 2. The Difficulty of Defining Concepts

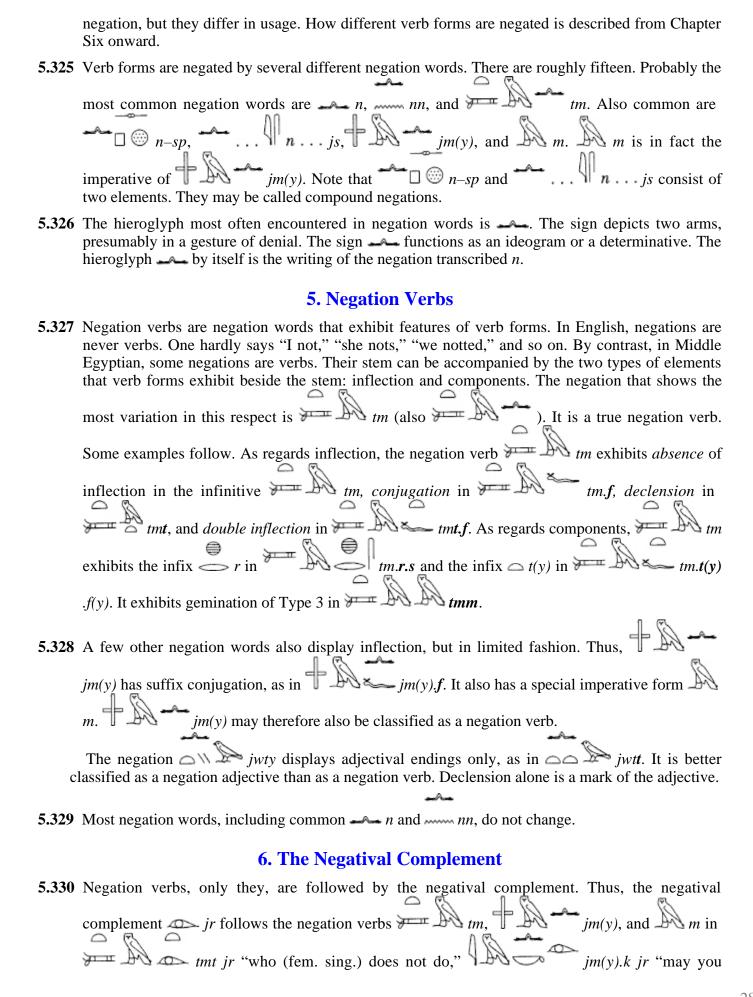
- **5.321** Dimensions **5** to **8** are concepts attached to tidbits of sound pattern described in Dimension **4**. As concepts, Dimensions **5**, **6**, **7**, and **8** are not visible. They are not accessible to observation. Only sound patterns can be observed. Then how is it possible to describe Dimensions **5**, **6**, **7**, and **8** if they cannot be seen?
- 5.322 Only *approximate* descriptions of the concepts in Dimensions 5, 6, 7, and 8 are possible. These descriptions tend to rely much on similar concepts in the reader's modern native language. Indeed, it is reasonable to assume that most languages have most things in common. But in drawing a parallel between a modern language and Egyptian, it is not possible to know how close the parallel is. There is hardly any reason to doubt that negation in English is about the same as negation in Egyptian. Passive in English is probably roughly the same as passive in Egyptian. But are they exactly the same? What matters for the present purposes is that they are fairly similar. Any difference in nuance would be difficult to observe. It is too easy for speculations about concepts, which are invisible, to lose contact with reality. Soon enough, concepts arise that exist only in the heads of grammarians and not in language itself.

## 3. Defining the Concept of Negation

**5.323** The first of the four concept dimensions **5**, **6**, **7**, and **8** is contrast between affirmation and negation. No lengthy philosophical discussion will be devoted here to the concept of negation. It is easy for everyone to agree what negation roughly is by considering negation in one's own language. This means in effect that negation is not defined here. Readers are simply referred to the concept of words such as "no," "none," "not," and "never" in their own language. When it comes to a concept like negation, simplicity is advisable.

## 4. Sound Patterns in Dimension 4 Linked to the Concept of Negation in Dimension 5

**5.324** The concept of negation by itself is not language. It has to be linked to and conveyed by a sound pattern to be language. There are many words linked to the same concept of negation. They differ in usage. Likewise, English "no," "none," "not," and "never" are all linked to the same concept of



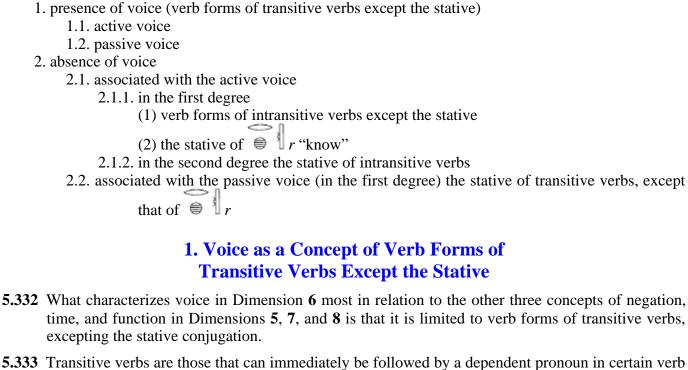
(masc. sing.) not do," and min if "don't do." Other negation words are mostly followed by a suffix conjugation.

# 7. Combinations of Negations

**5.331** Rarely, negation words combine, as in ______ nn tm.f jr "he will not fail to do."

# VI THE SIXTH DIMENSION: VOICE

**Coordinates** 



forms. Thus, stp "choose" is transitive. It can be followed by the dependent pronoun sy in. stp "choose" is transitive. It can be followed by the dependent pronoun sy in. stp.f stp.f sy "he chooses her." Another entity may alternate with the dependent pronoun, as in since since sy in stp.f stp.f snt.j "he chooses my sister." In intransitive verbs, the same verb form is never immediately followed by a dependent pronoun.

## 2. The Concept of Voice Defined in terms of the Two Roles of Inflection in the Event

5.334	Voice has everything to do with a verb form's inflection. Voice describes how inflection relates to
	the event expressed by the verb form. Inflection refers to an entity playing a role in the event
	expressed by verb forms, like $s$ in
	expressed by verb forms, like $  s   $ in $  M                                   $
	two distinct roles that the entity denoted by inflection can play. One role may be called active. The
	other role may be called passive. Voice accounts for this distinction between the two roles. Verb
	forms in which the role of the entity denoted by inflection is active may be called active. Verb
	forms in which the role of the entity denoted by inflection is passive may be called passive.

5.335 Double inflection (§§ 5.124–25) is special because it has *two* inflectional endings, declension by adjectival endings and suffix conjugation, as in stpt.f "that which he chooses."

- In defining voice, the entity that matters is the suffix conjugation, not the declension. Verb forms exhibiting double inflection are always active.
- **5.336** A verb form in which the entity denoted by inflection plays an active role is active in voice. A verb form in which the entity plays a passive role is passive in voice. It does not really matter how one defines active and passive as long it is clear that there is a contrast. In English, for example, the verb form "ate" in "I ate the bread" is active. But the verb form "was eaten" in "the bread was eaten" is passive. The entity "I" plays an active role in the event of eating. By comparison, "the bread" plays a passive role. Accordingly, "he saw" is active, whereas "he was seen" is passive.
- **5.337** No definition of active and passive is proposed here. A comparison with active and passive in modern languages should suffice. This is the second concept for which no definition is provided. Negation was left undefined in Dimension **5**. Relying on parallels in modern languages avoids deeper philosophical on parallels in modern languages avoids deeper philosophical speculations on these concepts. There is otherwise no doubt about the existence of voice. Its empirical foundation is secure. Certain tidbits of sound pattern in Dimension 4 are attached to the option active, others to passive.

# 3. Sound Patterns in Dimension 4 Linked to the Active and Passive Voice in Dimension 6

- **5.338** Some components in Dimension **4** are exclusively linked to the option active, others to the option passive. Some components are found in both active and passive verb forms. It is often not possible to identify a verb form as active or passive from what can be seen. But it is safe to assume that all verb forms, if written out fully, would be recognizable as active or passive.
- 5.339 What follows are two examples of components always exclusively linked to the option passive. The first component is gemination of Type 3, which occurs in just one single verb form, as in a ddt "what has been said." The second component is the infix (also and ) which occurs in many verb forms.
- **5.340** Two examples of components that can probably be linked to the passive voice are gemination of Type 2 (§ 5.188) and the variant writing of the general infix  $\triangle t$  (§ 5.209).
- 5.341 Examples of components that can appear both in active and in passive verb forms are the "weak" consonants (also) w and (also) if it is done. Because the same components also occur in active verb forms, it can be inferred that there is more than one component written (also) w and (also) if it is done.

# 4. Association of Verb Forms of Intransitive Verbs Except the Stative with the Active Voice

**5.342** The contrast between active and passive voice does not exist in intransitive verbs. But verb forms of intransitive verbs are always identical to active verb forms of transitive verbs, not to passive verb forms. (The stative is a special case [see below].) But this does not make verb forms of intransitive verbs active, for they have no passive counterparts. Active does not exist without passive. The two are a pair. However, all the verb forms of intransitive verbs except the stative are the same in form as active verb forms of transitive verbs. They are therefore active *by association in the first degree*.

# 5. Association of the Stative Conjugation with either the Active Voice or the Passive Voice

5.343	As distinct from every other verb form, the stative conjugation never exhibits voice. Every other verb form of transitive verbs is either active or passive. Every other verb form of intransitive verbs can be <i>associated</i> with the active voice because it is identical to an active verb form of transitive verbs. The stative is neither active nor passive. However, the statives of some verbs can be associated with the active voice. The statives of other verbs can be associated with the passive voice. The criterion is this time not identity in form, but the role of the entity denoted by inflection.
	Three cases need to be distinguished. First, statives of transitive verbs, except that of $r$
	"know," can be associated in the first degree with the passive voice. Second, the stative of $r$ "know" can be associated in the first degree with the active voice. Third, statives of intransitive verbs can be associated in the second degree with the active voice.
5.344	First, in the statives of all transitive verbs except $forms$
	If $kw$ in $A$
	same role as $2ij$ in the passive verb form $1ij$ $2ij$ $3ij$ $3i$
	chosen," and not the same role as the inflection $j$ in the active verb form $j$ in the active verb form
	jw stp.n.j "I have chosen." kw "I" plays a passive role, not an active role. The entity undergoes the choosing and does not perform. The stative of transitive verbs may therefore be associated in the first degree with the passive voice.
5 245	Second, the stative of the verb $r$ "know" is special. The verb is transitive. But
5.345	exceptionally, the entity denoted by inflection plays the same role as the inflection of active verb
	forms, not that of passive verb forms. Thus, the entity denoted by the inflection $kw$ in
	the verb form jw.j r.kw "I have come to know, I know" plays the
	same role as $j$ in the active verb form $f$ $r.n.j$ "that $f$ have come to know, that $f$ know." The entity performs the knowing and is not known by someone else. By virtue of this fact,
	the stative of $\bigoplus$ $r$ "know" may be associated in the first degree with the active voice.
5.346	Third, in the stative of all the intransitive verbs, the entity denoted by inflection plays the same role as the inflection in any other verb form of intransitive verb forms. For example, the entity denoted
	by the inflection $kw$ of the stative in the verb form $jw.j \ \delta m.kw$ "I have gone" plays the same role as the entity
	denoted by the inflection $j$ in the verb form $j$
	Now, sm.n.j is neither active nor passive. But it can be associated with the active (§ 5.342). The stative of intransitive verbs can therefore be associated with a verb form that

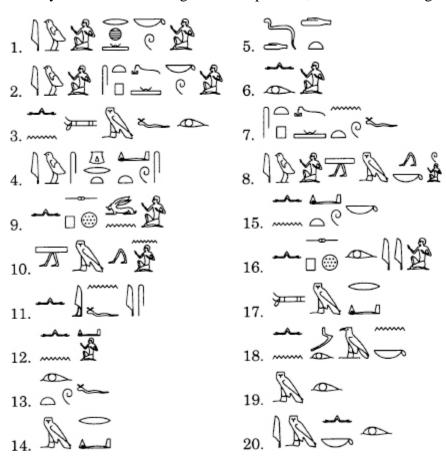
is itself associated with the active voice. The stative of intransitive verbs can therefore be associated in the second degree with the active.

#### **QUESTIONS**

1. Why is defining concepts difficult? 2. How is negation defined? 3. What are negation verbs? 4. Which is the quintessential negation verb? 5. What follows negation verbs? 6. What characterizes voice in Dimension 6 most in relation to negation, time, and function in Dimensions 5, 7, and 8? 7. What are transitive verbs? 8. To which part of a verb form does voice relate? 9. Are verb forms of intransitive verbs active or passive? 10. Is the stative active or passive?

#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Transcribe the following verb forms. If possible, assess whether they are active or passive and affirmative or negative by components in Dimension 4 attached to Dimensions 5 and 6 or otherwise. Identify instances of the negatival complement, which follows negation verbs.



## LESSON 36 (§§ 5.347-88)

# VII THE SEVENTH DIMENSION: TIME

#### Coordinates

- 1. verb forms without tense
  - 1.1. infinitive
  - 1.2. imperative and others
- 2. verb forms with tense
  - 2.1. absolute tenses
    - 2.1.1. non-contingent tenses
      - 2.1.1.1. non-preterite tenses
        - 2.1.1.1.1. past tense
        - 2.1.1.1.2. present tense
        - 2.1.1.1.3. future tense
        - 2.1.1.1.4. aorist tense
      - 2.1.1.2. preterite tenses
        - 2.1.1.2.1. past in the past
        - 2.1.1.2.2. present in the past
        - 2.1.1.2.3. aorist in the past
    - 2.1.2. contingent tenses
      - 2.1.2.1. aorist contingent tense
      - 2.1.2.2. future contingent tense
      - 2.1.2.3. past contingent tense?
  - 2.2. relative tenses (subordinated or dependent verb forms)
    - 2.2.1. past in relation to another tense
    - 2.2.2. aorist/present in relation to another tense
    - 2.2.3. future in relation to another tense

# 1. Dimension 7 Compared to Dimensions 5, 6, and 8

- **5.347** Dimensions **5**, **6**, **7**, and **8** together describe the concept side of *specific* verb forms. The choices that one makes within these four dimensions distinguish one verb form from other verb forms. Two other dimensions also denote concept. Dimension **2** describes the concept side of verbs regardless of any specific verb form. The choices one makes in Dimension **2** distinguish one verb from another verb, not one verb form from another verb form. Part of Dimension **3** describes the concept side of inflection, that is, one or two entities involved in the event.
- **5.348** When it comes to defining Dimensions **5** to **8**, the definition of Dimension **7** proposed here will be more complex than the definitions of Dimensions **5**, **6**, and **8**, though not nearly as complex as some definitions that have been proposed for it.

Dimensions 5 and 6, negation and voice, have been defined above. Their definitions were kept as simple as possible. In fact, they were not defined at all. Readers were simply referred to the phenomena of negation and of voice in their own language. The same kind of eminent simplicity will also be applied to Dimension 8 below, function. According to Dimension 8, verb forms can function as one of three other word types. Substantival verb forms function like substantives, adjectival verb forms like adjectives, and adverbial verb forms like adverbs. The substantive, the adjective, and the adverb have already been defined earlier. Substantives, and therefore also

- substantival verb forms, refer to an entity. The adjective refers to an entity and a property or to a property only. Adjectival verb forms always refer to both an entity and a property. Adverbs, and therefore also adverbial verb forms, refer to a circumstance.
- **5.349** It would be possible to devote profound speculations to such concepts as "negative" in Dimension **5**, "passive" in Dimension **6**, and "substantival" in Dimension **8**. On the other hand, the definitions of Dimensions **5**, **6**, and **8** are workable without such speculations. And in their simplicity, they do not distort the facts.
- **5.350** Complexity is not as easy to avoid for Dimension 7. There are several theories about this dimension and they differ much from one another. This is not the place to summarize a controversial and on-going debate. Is there a practical and simple road to defining the choices in Dimension 7?
- **5.351** One conceivable way is simply to list all the tidbits of sound pattern in Dimension **4** that are attached to tidbits of concept in Dimension **7**. Sound pattern is after all that part of language that is accessible to observation. Thus, one could presumably list, from among all the visible tidbits of sound pattern in verb forms, precisely those pertaining to Dimension **7**. Next, one could go down this list of tidbits of sound pattern and provide for each tidbit a working definition of the tidbit of concept that is attached to it. This procedure seems simple and straightforward enough. But there are two main obstacles that make this less than a smooth and clean-cut operation.
- **5.352** The first obstacle is that hieroglyphic writing is imperfect. The tidbits of sound pattern are not all visible. This includes the tidbits of sound pattern pertaining to Dimension 7. It is therefore impossible to list all of them. Because of this obstacle, it will often only be possible to limit the choice of options to two or more instead of to just one single option.

The second obstacle is a peculiar property of tidbits of sound pattern as they relate to tidbits of concept. This property is discussed in the next section.

#### 2. The Clustering of Tidbits of Concept in a Single Tidbit of Sound Pattern

- 5.353 On the whole, tidbits of sound pattern in Dimension 4 are linked to tidbits of concept in Dimensions 5 to 8. It would be simple if each tidbit of sound pattern were linked to one tidbit of concept. One tidbit of sound pattern for one tidbit of concept. If so, one could have selected from Dimension 4 just those visible tidbits that pertain to Dimension 7. This would have been a clean-cut operation. However, it is not the case that one tidbit of sound pattern is always linked to just one tidbit of concept. Instead, as far as hieroglyphic writing allows us to see, one tidbit of sound pattern can be linked to more than one tidbit of concept in more than one dimension. In other words, two or more tidbits of concept can cluster together into a single tidbit of sound pattern. This "entanglement" of tidbits of concept makes the description of the verbal system more difficult and its analysis more cumbersome. This "entanglement" also occurs outside the verbal system.
- 5.354 The verb form c c ddt "that which has been said" well illustrates the clustering of tidbits of concept. The verb form is characterized by Type 3 gemination (§ 5.189). The gemination
  - dd is a tidbit of sound pattern. It appears that three tidbits of concept are attached to it. First, dd indicates that the verb form is passive in Dimension 6. Second, dd marks that the verb form refers to a past event in Dimension 7. Third, the sound pattern dd signifies that the verb form is adjectival in Dimension 8. Thus, three tidbits of concept are attached to one tidbit of sound pattern. Or three tidbits of concept are clustered in the tidbit of sound pattern dd. Therefore, if dd is classified as a tidbit of concept pertaining to Dimension 7, this is not a complete statement about what dd tells us.
- 5.355 Another example is the verb form f(x) = f(x) tm.f jr. The tidbit of sound pattern

**5.356** Identifying verb forms means making choices between options. The aim is to find a single option from among two or more options. In making choices between options, one must first and foremost rely on what can be seen with the naked eye. The two obstacles described above make assessing what is visible much more difficult. Often, it is only possible to limit the choices, not to find the exact one choice.

#### 3. Difficulties in Defining Dimension 7

**5.357** Dimensions **5**, **6**, **7**, and **8** all concern the concept side of what distinguishes one verb form from another. Of these four dimensions, Dimension **7** is the most difficult to define. It is also by far the most discussed and the most controversial dimension. Many subtle and very subtle distinctions have been proposed for this dimension. Some proposals are diametrically opposed to others. This is a clear indication of controversy. Do certain proposed distinctions perhaps only exist in the heads of grammarians, and not in the demonstrable facts?

It is difficult to stay above the fray in choosing options for Dimension 7. To this extent, what is said here is provisional.

**5.358** One thing seems certain. Most options in Dimension 7 have to do in one way or another with the notion of *time*. A couple of other items such as the distinction between presence and absence of contingency have also been included in this dimension for the sake of convenience.

The verb has been defined as a word denoting change. Verb forms denote single instances of change. Change happens in time and over time. It comes therefore as no surprise that reference to time plays a role in the concept of verb forms.

Time is hard to avoid as a fact. Everyone is aware of the unstoppable progress of time. The fact is simple and obvious. What is less simple is how verb forms represent instances of change in relation to time.

In a much simplified account, these relations may be described as answers to the two following questions: *When in* time does a certain change take place? *How over* time does a certain change take place?

#### 4. Tense

- **5.359** All the statements that we make are uttered at a certain point in time. This point in time may be called the time of speaking or writing. Verb forms denote instances of change. One of the things that verb forms do is to relate instances of change to the time of speaking or writing. This property of verb forms is usually called tense. Because it concerns reference to time, tense belongs here in Dimension **7**. Tense answers the question *when in* time an instance of change occurs. To answer this question, one needs a point of reference. With tense, the time of speaking or writing serves as the basic point of reference in answering this question.
- **5.360** There is much controversy about the degree to which tense plays a role in Middle Egyptian verb forms. Everything comes down to identifying tidbits of concept attached to certain visible tidbits of sound pattern in verb forms. These tidbits of concept are not visible. Only tidbits of sound pattern are. This explains perhaps why the proposals about these tidbits of concept differ so widely.

Does tense play a role in the Middle Egyptian verb? In most instances, one can easily derive from the available tidbits of sound pattern in Middle Egyptian verb forms when in relation to the time of speaking or writing events expressed by verb forms occur. This seems difficult to deny,

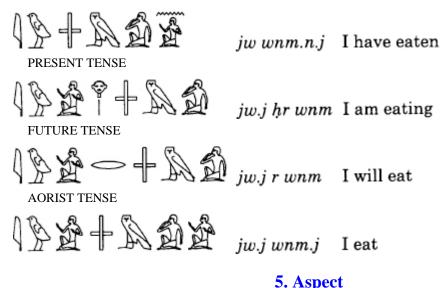
regardless of whatever else verb forms may *also* state about the relation of events to time. As will be seen, the present account heavily favors tense, as opposed to aspect (see below).

- **5.361** As regards tense, four options may be distinguished. An instance of change can happen at four possible times in relation to the time of speaking or writing:
  - (1) before the time of speaking
  - (2) during the time of speaking
  - (3) *after* the time of speaking
  - (4) at no specific time in relation to the time of speaking
- **5.362** These four possible options can be illustrated by English verb forms. "I have eaten" refers to an event that happened *before* the time of speaking. This is the past tense. "I am eating" refers to an event that is happening *during* the time of speaking. This is the present tense. It is sometimes also called the present continuous. "I will eat" refers to an event that will happen *after* the time of speaking. This is the future tense. In Middle Egyptian grammar, it is common to use the term Middle Egyptian grammar, it is common to use the term "prospective" instead of "future." "Future" seems just as adequate. However, the term "prospective" is now well established.

"I eat at home" refers to *no specific time* in relation to the time of speaking. In English grammar, "I eat" is often called a present tense. But it is not really a present tense. It does *include* the present point in time. But "I eat at home" also means that I ate at home yesterday and will eat there tomorrow. It is not limited to any specific point in time. By the same token, in showing no limitation, it refers in a sense to every point in time. The name used here will be "aorist." "Aorist" is a word related to English "horizon." The element -or- refers to a limit. "A-orist" refers to absence of a limit. The term indicates that the aorist as a tense is not limited to a certain time in relation to the time of writing or speaking.

**5.363** Middle Egyptian for "eat" is wnm. Middle Egyptian equivalents of the four tenses listed in § 5.362 are as follows.

PAST TENSE



**5.364** Tense seems fairly clear-cut as a notion. The time of speaking or writing is a sharply defined notion. Relating events to this moment in time is also easy to understand. In sum, tense is relatively uncomplicated

Tense is an answer to the question *when in* time a certain event occurs. It is one category. Another category is aspect. Aspect is much less clear-cut than tense. In fact, there is no generally

accepted definition of aspect. This lack of an unambiguous definition just indicates the level of controversy. To some extent, it is perhaps safe to state that aspect pertains *point* in time or it can extend over a certain *stretch* in time. This difference may be described as a difference of aspect.

There are languages in which the role of aspect is very obvious. Even so, the nature of aspect tends to differ from one language to another. The case is not clear for Middle Egyptian. It is not certain to which degree Middle Egyptian exhibits aspect and it is not certain what kind of aspect is exhibited. It used to be common to describe Middle Egyptian verb forms more in terms of aspect than in terms of tense. But then, the role of the future tense used to be underrated. It is now widely accepted that there is a distinct future tense in Middle Egyptian. The existence of a distinct future tense is by itself an argument in favor of a strong presence of tense in Middle Egyptian, in addition to what else verb forms express. The present account gives a dominant role to tense over aspect. Tense seems certainly present to some extent. The following account is to some extent necessarily provisional. With a dead language, it is not certain that it will ever be possible to resolve the matter conclusively. In general, making proposals about tidbits of concept is a precarious undertaking, because these tidbits are ultimately invisible.

#### 6. Absolute and Relative Tenses

#### a. Definition

**5.365** Absolute tenses are past, present, future, or a relation to the time of speaking or writing. Relative tenses are past, present, future, or a relation to the tense of another verb form. Independent verb forms exhibit absolute tense. Dependent or subordinate verb forms exhibit relative tense.

#### b. The Principle of Relative Tense

**5.366** The difference between independence and subordination is one thing. The difference between absolute tense and relative tense is another thing. But the two distinctions are related to one another. This relation may be called the *principle of relative tense*. The principle of relative tense may be formulated as follows. When a first verb form is subordinated to a second verb form, the tense of the first verb form becomes relative to the tense of the second verb form. If the first verb form is in the past tense and the second verb form is in the past tense, then the first verb form is past in relation to a past.

#### c. Middle Egyptian Compared with English

**5.367** The principle of relative tense is much less applied in English than it is in Middle Egyptian. As a result, Middle Egyptian sometimes has one verb form where English has two. This difference between English and Middle Egyptian may be illustrated by an example.

Consider the verb form Stpt.n.f. This is a subordinated verb form. It therefore exhibits relative tense. Furthermore, it is a past tense. If this verb form is subordinated to a present tense, such as "he is telling me," then it is past in relation to a present tense and corresponds in English to "(he is telling me) that which he has chosen." If this verb form is subordinated to a past tense, such as "he told me," then it is past in relation to a past and it corresponds in English to "(he told me) that which he had chosen." As one can see, Middle Egyptian exhibits just one verb form,

namely stpt.n.f, whereas English exhibits two, "that which he has chosen" and "that which he had chosen."

#### 7. Non-contingent and Contingent Tenses

**5.368** Middle Egyptian has special verb forms that refer to an event that only happens or will happen *if* another event happens first. The other event serves as a *condition* for the event expressed by the

special verb form to happen. Suppose that I state, "then I will pay you," implying "if you give me what I want." "Then I will pay" can be expressed by a special verb form in Middle Egyptian.

**5.370** Contingent verb forms marked by r or k3 do *not* state that an event does or does not occur or will or will not occur. Indeed, they do not state that the occurrence of an event is true or actual. They state that a certain event does or will occur *if* another event occurs first.

#### **8. Non-preterite and Preterite Tenses**

- **5.371** A preterite tense is a tense *projected one step into the past*. For example, the preterite of the present tense refers to an instance of change that used to be present at some point in the past. The preterite of the past refers to an instance of change that used to be past at some point in the past. In sum, preterite tenses express that an instance of change *was* past, present, future, or a orist at some *past* point in time. In fact, preterite tenses might be referred to as the *past in the past*, the *present in the past*, the *future in the past*, and the *aorist in the past*.
- **5.372** For example, English "he was eating" may be described as a *present in the past*. It refers to an instance of change that was present tense at some point in the past. At some point in the past, it was possible to describe this event as "he is eating."

English examples of the four non-preterite tenses are the past tense "he ate," the present tense "he is eating," the future tense "he will eat," and the aorist tense "he (generally) eats (at home)." The corresponding preterite tenses are the past in the past "he had eaten," the present in the past "he was eating," the future in the past "he was going to eat," and the aorist in the past "he would (generally) eat (at home)" or "he used to eat."

**5.373** In Middle Egyptian, the preterite equivalents of tenses are all marked by auxiliaries derived from the verb wnn "be."

An example of a non-preterite tense is the aorist \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \) \( \

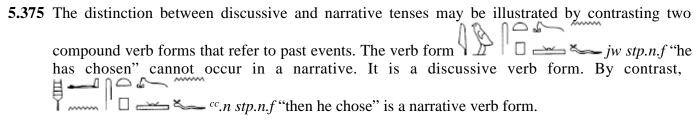
Another example of a tense is the present tense is y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y = 1 y

#### 9. Narrative and Discussive Tenses

**5.374** In recent years, there has been growing sympathy for the view that there are two principal modes of speaking, the narrative mode and the discussive mode (following Harald Weinrich). In the narrative mode, stories are told. In the discussive mode, a topic is discussed. The narrative world is one that is far from our own world. The discussive world is the world of our daily lives.

There is reason to believe that all verb forms can on the whole mostly be divided into two large groups: narrative verb forms and discussive verb forms. Typical of the narrative mode are tenses such as the Simple Past ("he did") and the Pluperfect ("he had done"). Typical of the discussive mode are tenses such as the Present Perfect ("he has done") and the present and future tenses.

There is some evidence to support that the Simple Past ("he did") is not always first and foremost a past tense but sometimes also expresses narration. Novels are written in the Simple Past. Yet readers experience the story very much as present. The Simple Past seems to tell readers that the events being told bear no relation to their own lives. It's just a story. Along the same lines, science fiction is narrated in the Simple Past. Yet, the events clearly play in the future. Again, the Simple Past marks that a story is being told. Stories allow readers to escape from their own worlds.



# VIII THE EIGHTH DIMENSION: FUNCTION

#### Coordinates

- 1. independent
- 2. dependent
  - 2.1. nominal (referring to entities)
    - 2.1.1. substantival (referring to entities only)
    - 2.1.2. adjectival (referring to entities and properties)
  - 2.2. adverbial (referring to circumstances)

#### 1. Definition of Function

**5.376** Middle Egyptian exhibits special verb forms that can function like one of the following three other word types: the substantive, the adjective, and the adverb. Verb forms functioning like substantives may be called substantival verb forms. Verb forms functioning like adjectives may be called adjectival verb forms. Verb forms functioning like adverbs may be called adverbial forms. The specific sound patterns that are attached to each of these functions are described from Chapter Six onwards.

#### 2. Entity, Property, Circumstance

**5.377** Substantives refer to an entity. So do substantival verb forms. Adjectives mostly refer to an entity and a property. Adjectival verb forms always do. Adverbs refer to a circumstance. So do adverbial verb forms. Substantival verb forms may therefore also be called entity verb forms, adjectival verb forms also property verb forms, and adverbial verb forms also circumstance verb forms.

#### 3. Independent and Dependent Verb Forms

**5.378** Verb forms that are neither substantival, nor adjectival, nor adverbial may be called independent. By contrast, substantival, adjectival, and adverbial verb forms may together be called dependent verb forms.

#### 4. Nominal Verb Forms

**5.379** Substantival and adjectival verb forms both refer to entities. They have something in common that jointly sets them apart from adverbial verb forms. It is therefore convenient to reserve a name for the two together. Substantival and adjectival verb forms will both be called nominal verb forms.

#### 5. Dependent Verb Forms and Clauses

**5.380** Substantival verb forms are part of substantival clauses. Substantival clauses, including those with substantival verb forms, will be treated in Chapter 7. Adjectival verb forms are part of adjectival clauses. Adjectival clauses, including those with adjectival verb forms, will be treated in Chapter 8. Adverbial verb forms are part of adverbial clauses. Adverbial clauses, including those with adverbial verb forms, will be treated in Chapter 9. Independent verb forms are part of verbal sentences. Independent verb forms will be described in Chapter 6.

#### 6. An Example: The Substantival Verb Form, Functioning like a Substantive, and

#### **Referring to an Entity**

#### a. Substantival Verb Forms Are Not Substantives

**5.381** The substantive has been described in more detail above. What does it mean that substantival verb forms function like a substantive? It certainly does not mean that substantival verb *are* substantives. Substantival verb forms are verb forms. Being substantival does not make verb forms into substantives. Nor are the verbs from which substantival verb forms are derived substantives. A verb form is always a verb form, whatever its function, and a verb is always a verb.

#### b. Affinity of Substantival Verb Forms with Substantives

**5.382** It has been noted above that substantival verb forms function like substantives. This does not mean that they function one hundred percent like substantives. There are differences. But then, the similarities between substantives and substantival verb forms are overwhelming. Certain verb forms exhibiting certain sound patterns are so very often demonstrably found in positions in which one otherwise also finds substantives that this seems to be their most distinctive characteristic. By virtue of this striking and undeniable fact alone, it seems eminently convenient to call such verb forms "substantival." It is then a small step towards assuming that these verb forms are *always* substantival, that being substantival is their very essence. As substantival verb forms, they refer to entities.

#### c. Substantival Verb Forms Refer to Entities

**5.383** What does it mean for a whole verb form to refer to an entity, that is, to a thing? What can this be compared to in English? Perhaps, an example can best explain how verb forms are able to refer to entities. Consider "he gives," which is the English equivalent of an independent verb form in Middle Egyptian. How can one refer to "he gives" as an entity or a thing? In English, one can use the expression "the fact that he gives," viewed as a thing, or just "that he gives."

5.384 "That he gives" is the English equivalent of the Middle Egyptian substantival verb form dd.f. The verb form dd.f "that he gives" displays gemination of Type 1. The verb rd(y) "give" is a third-weak verb. It will be seen later that gemination of Type 1 in third-weak verbs always marks substantival verb forms.

Incidentally, the tidbit of sound pattern  $\Delta dd$  is also attached to the agrist tense in Dimension 7. As was noted above, tidbits of concept can cluster into a single tidbit of sound pattern (§§ 5.353-56). In the present case, the tidbit of concept "agrist" in Dimension 7 and the tidbit of

concept "substantival" in Dimension 8 both cluster in the tidbit of sound pattern  $\Delta dd$ .

#### d. Examples of Positions Occupied by Both Substantival Verb Forms and Substantives

5.385 The verb form \( \begin{align*} \dd.f \) is an example of a substantival verb form. This means three things at the same time. First, \( \begin{align*} \dd.f \) refers to entities. Second, \( \begin{align*} \dd.f \) roughly corresponds to "that he gives" or "the fact that he gives" in English. Third, \( \begin{align*} \dd.f \) appears as a rule in positions in which one can also find substantives.

**5.386** What does it mean for a verb form to appear in the same positions as substantives? This is perhaps

best illustrated by means of examples. In the preceding chapters, several positions are described in which one finds substantives. In what follows, eight such positions will be listed. For each position, a generic example is first presented in which a substantive occupies the position. A generic

example is then presented in which the substantival verb form  $\Delta = 0$  dd.f "that he gives" occupies the very same position.

5.387 The first two positions (1 and 2) concern the genitive and are discussed in Chapter Two. The third position (3) is that following prepositions. It is described in Chapter Three. The last five positions (4, 5, 6, 7, and 8) are found in substantival, adjectival, and adverbial sentences. They have been introduced in Chapter Four. In all these positions, it is normal to find substantives.

# 5 EIGHT POSITIONS IN WHICH BOTH SUBSTANTIVES AND SUBSTANTIVAL VERB FORMS A 388 PPEAR

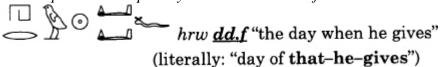
(The positions in question are underlined. The substantive or substantival verb form appearing in them are marked in **bold**.)

1. SECOND MEMBER OF THE DIRECT GENITIVE



(literally: "day of birth)"

the same position occupied by a substantival verb form



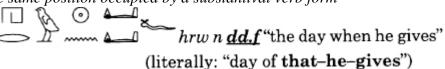
2. SECOND MEMBER OF THE INDIRECT GENITIVE

this position occupied by a substantive



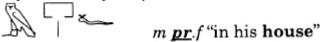
(literally: "day of birth")

the same position occupied by a substantival verb form

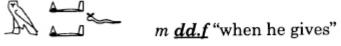


3. FOLLOWING PREPOSITIONS

this position occupied by a substantive



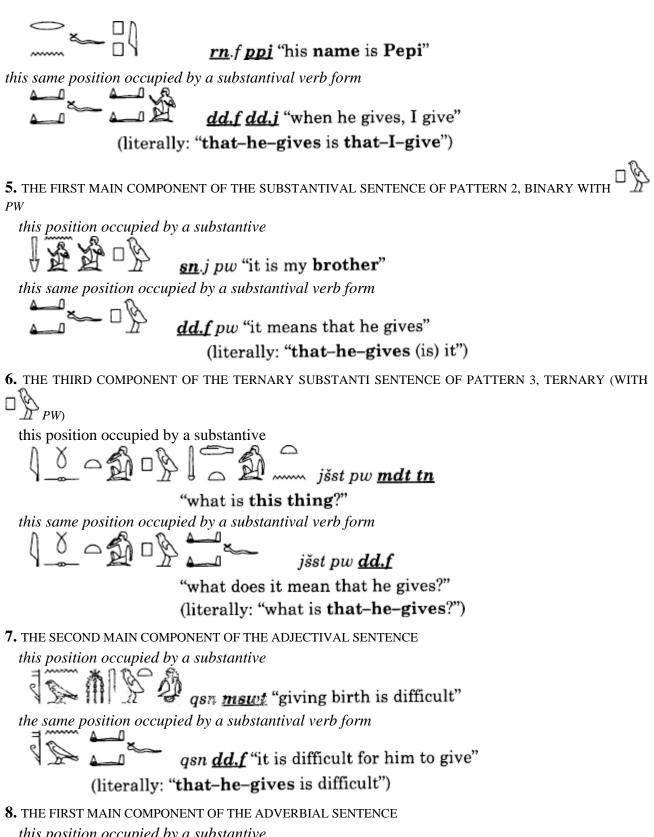
the same position occupied by a substantival verb form



(literally: "in that-he-gives")

**4.** FIRST AND SECOND COMPONENTS OF THE SUBSTANTIVAL SENTENCE OF PATTERN 1, BINARY WITHOUT PW

this position occupied by a substantive



this position occupied by a substantive



mk it.j m pr.f "my father is in his house" the same position occupied by a substantival verb form



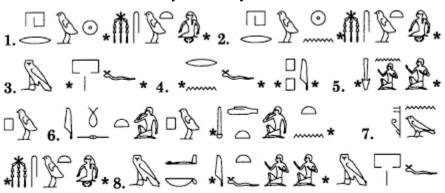
mk <u>dd.f</u> m pr.f "it is in his house that he gives" (literally: "that-he-gives (is) in his house")

#### **QUESTIONS**

1. Which two obstacles render the assessment of tidbits of sound pattern pertaining to Dimension 7 more difficult? 2. How does tense relate an instance of change to time? 3. Which are the four tenses? 4. What is the difference between absolute tenses and relative tenses? 5. How does the principle of relative tense relate the distinction between absolute and relative tense to the distinction between independence and subordination? 6. How does a contingent verb form represent an instance of change? 7. How do non-preterite tenses and preterite tenses differ? 8. By which tidbit of sound pattern are preterite tenses marked? 9. Which concept do substantival verb forms denote? 10. How do concepts denoted by substantival and adjectival verb forms differ and what do they share? 11. How do substantives and substantival verb forms visibly resemble one another?

#### EXERCISE ON THE USE AND TRANSLATION OF SUBSTANTIVAL VERB FORMS

Transcribe and translate. Replace substantives or substantival phrases placed between two asterisks (*) with dd.f "that he gives" (but with dd.s "that she gives" in the second phrase in 4). Translate the result literally and freely.



# APPENDIX I THE STORY OF THE DECIPHERMENT

FEW TRIUMPHS OF HUMAN INGENUITY capture the imagination as much as the decipherment of hieroglyphic writing. In 1822, prior conceptions about Egyptian civilization became null and void in a single moment of brilliance. The decipherment was the beginning of the modern discipline of Egyptology and of the large scale archaeological exploration of Egypt.

The decipherment came in the wake of Napoleon's expedition to Egypt (1798-1801). From a military perspective, the expedition was a disaster. However, this was the Age of Reason. A team of elite scholars joined the expedition to record Egypt in all its aspects. The result was the monumental, multi-volume *Description of Egypt.* A large corpus of hieroglyphic texts was now publicly available. But it was the discovery of one text in particular that most furthered the cause of the decipherment.

Not far from the Mediterranean coast, about thirty miles east of Alexandria, lies a town whose name in Arabic is Rashid (rah-SHEED). Rosetta is an anglicized version. Rosetta was founded in the ninth century AD. It had once been a flourishing seaport. But by the late eighteenth century, it had declined into a small sleepy town. About four miles northwest of Rosetta, at a strategic location on a branch of the Nile, stood a ruined medieval Arab fort, constructed partly out of stones from ancient Egyptian monuments. While rebuilding this fort and working on its foundations, French soldiers in August of 1799 hit upon a remarkable stone slab. It was a little over three feet high, about two feet wide, and almost a foot thick, weighing about 1600 pounds. The top portion was missing, but the stone in its original form must have stood about six feet high. The front was inscribed with three scripts: Greek at the bottom and two undeciphered scripts at the top and in the middle. The potential significance of the inscriptions was realized on the spot and the slab was transported to Cairo. There it appeared that the Greek stated that the undeciphered texts were two different Egyptian versions of the Greek text. The Greek version was soon published and copies of the whole inscription were made widely available.

After Napoleon's defeat, the stone was turned over to the British in Alexandria under the terms of capitulation. It arrived in London in early 1802 and was deposited at the British Museum where it is now on permanent exhibit.

The extraordinary history of the stone and its crucial role in the decipherment have overshadowed its importance as a historical document. The text is a royal decree, now generally referred to as the Memphis Decree. It dates to 196 BC, Year 9 of king Ptolemy V, a relatively recent date for Egyptian history. The Ptolemies were Greek-speaking rulers of Macedonian descent who came into power after the death of Alexander the Great, who conquered Egypt in 332 BC. This explains the presence of a Greek version in a document from Egypt. Through the decree the king promises various benefits to the temples such as tax cuts. In return, the priesthood pledges to promote the king's cult throughout the land. Other fragmentary copies of the Memphis Decree besides the Rosetta Stone have emerged elsewhere in Egypt.

From its discovery to the watershed developments of 1822, the Rosetta Stone formed the focus of all deciphering efforts. It fired the imagination. But it did not provide the final clues. However, as the beacon of incentive, it has rightly assumed its place in history as symbol of the decipherment.

The process that led to the decipherment is complex and will not be retraced here in detail. Many felt called and took up the challenge. With hindsight scattered correct statements can be isolated. But many of these statements are just lucky guesses. Many more are mixed with flagrantly false views about the nature of hieroglyphic writing. And above all, plausible assumptions and attractive hypotheses do not constitute proof. Yet three scholars deserve mention for their contributions: the Frenchman Silvestre de Sacy, the Swede David Åkerblad, and especially the Englishman Thomas Young, one of the great scientists of his time.

Three definitions of the decipherment are possible. First, in the broadest sense, the decipherment involves the recovery of three items: (a) the *Egyptian language* in its successive stages; (b) *three scripts*; (c) the *system of hieroglyphic writing*. In this broad sense the decipherment is still on-going today. Second the decipherment can be more narrowly defined as pertaining to item (c) only: the recuperation of the

hieroglyphic script as a system of putting a language into writing. Two steps will be distinguished in this second definition. Third, even more narrowly, the decipherment consists of the second of the two steps in the second definition, namely the pivotal insights that Jean-François Champollion had in the morning of 14 September 1822. Remarks on items (a), (b), and (c) listed above now follow.

- (a) The five stages of the language are Old Egyptian (spoken around ca. 2500 BC and some time before and after that), Middle Egyptian (2000 BC), Late Egyptian (1200 BC), Demotic (500 BC), and Coptic (AD 400). The five stages are to a great extent artificial. They obscure the fact that Egyptian evolved very gradually. The dates between parentheses are those at which and some time before and after which the five stages were presumably spoken. The written counterparts often survived after a stage had ceased being spoken, causing overlap with the next spoken stage. The first four stages of Egyptian are written in hieroglyphs. The knowledge of the hieroglyphic script perished together with the ancient Egyptian religion sometime soon after AD 500. But the Egyptian language never died out: although no longer spoken, Coptic has survived as the liturgical language of the Coptic church. It may be noted that "Coptic" is just another form of the word "Egypt."
- (b) The three main hieroglyphic scripts are hieroglyphic proper and its two cursive derivatives hieratic and demotic. Hieroglyphic proper relates to hieratic somewhat as printed English does to handwritten English. Demotic is the script used to write the fourth stage of the language, which is also called Demotic. The three terms "hieroglyphic," "hieratic," and "demotic" are borrowed from the two Greek-writing authors that first used them more or less in the desired sense. Herodotus in the fifth century B.C. used the term "demotic," but did not distinguish between "hieroglyphic" and "hieratic." The latter two terms are borrowed from Clement of Alexandria (*ca.* A.D. 200), who does make the distinction.
- (c) As a system, hieroglyphic writing is a *mixture* of different types of signs. There are three basic types. *Sound* signs refer to one, two, or three consonants. Vowels are not written. Thus, the hieroglyph depicting an owl, refers to the sound m; , depicting a viper, denotes f; , depicting an arrow, refers to the two sounds sn. m by itself is used to write the word m "in"; f means "his." The second type is *meaning* signs, which denote what they depict. Thus, depicts a house and is used to write the word pr "house." *Determinatives*, finally, appear at the ends of words, specifying the meaning of words in a general way. Thus, words referring to human beings often end in f. An example is f so "brother" (f is a f phonetic complement, specifying the second sound of f so. The phrase f in f is a f phonetic f in f in

mentioned above are f, m, and m. These hieroglyphs are together called the alphabet, somewhat improperly since they are not the only signs of the hieroglyphic script as true alphabets are in other scripts. The hieroglyphic alphabet accounts for as many as half of all the signs in any hieroglyphic text. Deciphering the alphabet would therefore be an important step in deciphering all of hieroglyphic writing.

With these remarks on language, script, and system in mind, the nature of the two Egyptian versions on the Rosetta Stone may be briefly described. The nearly complete version in the center of the Rosetta Stone is in Demotic. This was the stage of Egyptian spoken at the time when the decree was promulgated. It is written in the demotic script, a cursive variant of hieroglyphic proper. The fragmentary version at the top of the stone is in Middle Egyptian, the stage of Egyptian spoken many centuries earlier around 2000 BC and described in this grammar. As Egyptian evolved and changed, Middle Egyptian survived alongside the later stages of the language as a written idiom used for academic and religious purposes. But it changed much due to contact with the later spoken stages of Egyptian and also due to loss of contact with

the original and genuine Middle Egyptian. It appears that the Rosetta Stone has three versions of the same text. But it is not quite *tri*lingual. The two Egyptian versions can be counted as one language.

Two main steps may be distinguished in the final stages of the decipherment. Together these two steps make up the second definition of the decipherment suggested above, that is, the recovery of the system of hieroglyphic writing. The second step by itself is the narrowest definition of the decipherment and pertains to the events of 14 September 1822.

The decipherer, Champollion (1790–1832), was in two respects ideally prepared for the epochal feat. Circumstantial evidence had long made it plausible that the hieroglyphic language was in a sense older Coptic, an earlier stage of the same Egyptian language. Champollion studied Coptic as well as he could with the purpose of deciphering hieroglyphic writing. In addition, he became thoroughly acquainted with the shapes of hieroglyphic writing. By 1821, he had convinced himself of what had been suspected and suggested before, that the three hieroglyphic scripts were basically the same. Finding the key to one would therefore result in the decipherment of all three. Both his knowledge of Coptic and his thorough acquaintance with hieroglyphic forms played a role in what happened on 14 September 1822. They would also allow Champollion to progress at record pace in translating texts once the key to the writing system had been found.

The two steps of the final stage of the decipherment, the recovery of the system of hieroglyphic writing, are as follows.

(1) Step One: Decipherment of the Alphabet (Spring and Summer of 1822). When facing an unknown language in an unknown script, the first thing one looks for is words of which one already knows the meaning and the sounds. This may provide a clue as to how the script represents meaning and sounds. But this seems like putting the cart in front of the horse. Where to find such words before the script is deciphered? Hieroglyphic inscriptions do in fact contain them. Already in the eighteenth century, it had been conjectured, rightly, that hieroglyphs enclosed by a characteristic oval shape called a cartouche denote royal names. Since Alexander, Egypt had been ruled by Macedonian and Roman kings with Greek and Latin names well-known from classical sources. It was reasonable to assume that, since foreign royal names such as Ptolemy and Cleopatra could not be translated, hieroglyphic writing would present them roughly as pronounced in Greek. The spellings of foreign names could therefore offer the sought after point of departure. On the subject of foreign names, some modest progress had been made before Champollion by the above-mentioned de Sacy, Åkerblad, and Young.

Incidentally, another approach, practiced especially by Young, was to measure the lengths of the three versions of the Rosetta Stone and match groups of hieroglyphs with words in Greek on the basis of length. Many correct matchings resulted but also many erroneous ones. However, knowing *that* a name is written in a certain way does not mean knowing *why*.

In comparing what had to be the name of Ptolemy in the Demotic version of the Rosetta Stone with what seemed to be the name of Cleopatra in a Demotic papyrus, Champollion observed that the first hieroglyph in the name *P*tolemy was the same as the fifth in the name Cleopatra and could therefore be identified provisionally as the hieroglyph expressing the sound *p*; likewise, he noted that the fourth hieroglyph in the name Ptolemy was the same as the second in the name Cleopatra.; and so on. By repeating this matching procedure with several foreign names, Champollion was able to reconstruct a fairly complete alphabet for Demotic.

He accomplished the same feat a short time later for the alphabet of hieroglyphic proper, which differs in certain ways from the Demotic alphabet. This began when he compared what appeared to be the name Ptolemy in the top portion of the Rosetta Stone with what had to be, judging from the context and an accompanying Greek inscription, the name Cleopatra on an obelisk brought to England by W.J. Bankes and erected near his home at Kingston Lacy in Dorset. Champollion had received a copy of this text in early 1821. Apparently, the name Cleopatra had been written as a suggestion in the margin of his copy, perhaps by Bankes. There has been much speculation as to whether this marginal note may have helped Champollion. But again, knowing that certain hieroglyphs represent a certain name does not mean having deciphered them. If one saw a photograph of Mao with a few Chinese characters below it, it would be reasonable to assume that these characters are his name. But this is not the same as reading Chinese.

In retrospect, the recovery of the alphabet was possible due to the fortunate coincidence of three facts: (1) that there were foreign names known from Greek sources in hieroglyphic texts because Egypt had

been ruled by foreigners; (2) that these names were spelled phonetically or alphabetically; (3) that the alphabet played a crucial role in hieroglyphic writing of all it, it would be reasonable to assume that these characters are his name. But this is not the same as reading Chinese.

In retrospect, the recovery of the alphabet was possible due to the fortunate coincidence of three facts: (1) that there were foreign names known from Greek sources in hieroglyphic texts because Egypt had been ruled by foreigners; (2) that these names were spelled phonetically or alphabetically; (3) that the alphabet played a crucial role in hieroglyphic writing of all times. These three facts are independent from one another. If any had been otherwise, the chances at deciphering the hieroglyphic script would have been reduced significantly, or the decipherment would have had to follow a different path.

The alphabet had now been deciphered. This discovery was communicated to the French Academy in the famous *Letter to Mr. Dacier*, which is often referred to as the Magna Charta of the decipherment. However, it contains only the first step. After all, the alphabet might have been used only to spell foreign names. A second step was required. This second step was taken on 14 September 1822. The developments on that day constitute the decipherment of hieroglyphic writing in the narrowest sense.

(2) Step Two: Mixed Character of the Hieroglyphic Script. Champollion had not had access to many texts from before the Ptolemaic period when, in the early morning of September 14, 1822, he received copies of inscriptions from the famous rock temple at Abu Simbel, built in the thirteenth century BC. Thoughts close to or identical to the following must have gone through Champollion's mind that morning.

First, he noticed the royal name  $\stackrel{\bullet}{=}$  written vertically inside a cartouche. Second, he knew from his alphabet that the sign  $\stackrel{\bullet}{=}$ —, depicting a door-bolt, represented s. Third, reading  $\stackrel{\bullet}{=}$ — as s yielded the reading ?-?-s-s for the royal name. Fourth, in interpreting the sign  $\stackrel{\bullet}{=}$  at the beginning, Champollion had the good fortune of taking not just sound but *also meaning* into account by interpreting  $\stackrel{\bullet}{=}$  as a depiction of the sun and thinking of the Coptic-Egyptian word for "sun," namely Re (PH). Fifth, this additional observation yielded the reading Re-?-s-s. Sixth, Champollion knew the royal name Ramses often mentioned in Greek sources. Seventh, he hypothesized that Re-?-s-s was in fact Ramses. Eighth, he read

, now assumed to depict three animal skins tied together, as the sound m.

It is not clear, and may never be, how close these eight cognitive processes are to what happened. But something close must have been the case. Nor is it clear which role precisely the following two facts played in the decipherment. In a sense, a comprehensive account of the decipherment taking into account Demotic and as many sources as possible still remains to be written. A most lucid account is Henri Sottas' introduction to the centenary reprint of the *Letter to Mr. Dacier*. First, Champollion knew at some point

that ms in the royal name Thutmosis could be written either ms or ms, confirming the homophony

of — and . Second, by comparing the locations of words in the hieroglyphic and Greek portions of the

Rosetta Stone, it had been established that iii is part of the word for "birthday" and it was known that "birth" is *mise*—containing the same consonants as *ms*—in Coptic.

If ms is ms and  $-\infty$  is ms is ms and ms is ms in ms and ms is ms in ms in ms is ms in ms in

is a biliteral sound sign denoting m + s. Richard Lepsius discovered biliteral sound signs in 1837, after

Champollion's death in 1832. Meanwhile, Champollion's erroneous assumption that hieroglyphs like

and  $\frac{1}{2}$  both represented m posed no significant obstacle. Biliteral sound signs are often accompanied by uniliteral sound signs specifying the value of one of its two sounds. This is phonetic complementation.

Reading m + s = ms or as ms + s = ms therefore yields the same result. But in consequence, Champollion's alphabet contained many homophones. Which alphabet has 130 signs? This

consideration served as an argument against Champollion's system. Lepsius' discovery of the biliteral sound signs and of phonetic complementation did much to remove lingering doubts about the validity of Champollion's discovery.

On 14 September 1822, Champollion acquired certainty, not only that his alphabet was valid for all of Egyptian history and that Egyptian was related to Coptic, but above all that the hieroglyphic script was a *mixed* system. It consists of both meaning signs and phonograms. This may have been suspected before, but providing positive proof by means of concrete and indisputable examples is another matter. The name Ramses remains an excellent illustration. The first part is written with the *meaning* sign . The second

part is written with the *sound* signs and ____.

The discovery of 14 September hardly meant the end of the decipherment in the broad sense. In a way, with the finding of the key to hieroglyphic writing, the decipherment could begin in earnest. Champollion was able to proceed fast. With his alphabet, he could identify the sounds of many words in any text. Many Egyptian words are preserved in Coptic. He relied on his thorough knowledge of Coptic to match the obtained sound sequences with Coptic words, often successfully. He read hieroglyphic texts in Coptic fashion, as it were, and even transcribed them in Coptic characters, which are the Greek alphabet plus a few added signs. This path could obviously be followed only with words written mainly with *sound* signs. But for words written with meaning signs and determinatives, there was help of another kind.

Meaning signs and determinatives depict what they mean. One can derive the rough *meaning* of a word from the picture with which it is written. But what about the *sounds?* If the word happened to be preserved in Coptic and one happened to have chosen the correct Coptic word, one was lucky. There was otherwise no way of establishing the sounds of a word positively until a variant writing containing sound signs emerged. Such variant writings are often found in the earliest hieroglyphic texts, many of which were discovered only decades later. When the sounds of a word were not known with certainty, Champollion used the sounds of the Coptic word with the same meaning. For example, the sign represents desert hills and is used to write the word for "foreign land." Champollion used the sounds of the Coptic word for "earth, land" to transcribe "foreign land," namely <u>kah</u>. Now we know that "

"foreign land" is to be read as *khaset*. Likewise, Champollion did not read  $\Box$  "house" as pr, because no spelling such as  $\Box$  ( $\Box = p, \Longrightarrow = r$ ) was known to him. Instead, he used the Coptic word, which sounds somewhat like ay in English "way." Champollion therefore deciphered quite a few words in meaning only.

Because of the precipitation of insights, 14 September 1822 is the pivotal date in the decipherment of hieroglyphic writing. It is now regarded as the day of birth of modern Egyptology.

# APPENDIX II SOLUTIONS TO THE EXERCISES

# LESSON 2 (pp. 26-28)

EXCERCISES IN TRANSCRIBING UNILITERAL PHONOGRAMS (THE "ALPHABET")

The transcription of each word is followed by (1) the school pronunciation and by (2) just one translation equivalent or, if the word cannot be translated by a single word, by some other clarification of its function. Some words are particles, which are difficult to translate. The translation equivalents are not always certain. Also note that many verb forms have y as a third consonant. The consonant y is rarely ever written out. But it is customary to represent y nevertheless in transcription. In accordance with this tradition, y is also transcribed below, but between parentheses as (y).

A 1 jw (eeyoo) a particle 2 jm (yim/eem) there 3 jn (yin/een) by (agent) 4 jr (yir/eer) if 5 js (yis/ees) a particle 6 js (yisech/eesech) a particle 7 bw (boo) place 8 pn (pen) this 9 nty (entee/netee) who, which, that 10 nts (entes/netes) she 11 nts (entes/netes) she 12 ntk (entek/netek) you (masculine) 13 rn (ren) name 14 h3 (hah) oh! (an interjection) 15 n^c (henah) with 16 r (her) near 17 grt (gheret) a particle 18 t3 (tah) that (feminine) 19 tf(tef) that (feminine) 20 d (jed) say

In what follows, letters and numbers of ideograms and determinatives according to the Gardiner sign-list appear in ^{SUPERSCRIPT}. The signs in question can be located in the abbreviated version of the Gardiner list found at the end of this book (see pp. 733-74).

**B** 1  $3t^{N5}$  (aht) moment 2  $jp^{Y1}$  (yip/eep) count 3  $c\bar{s}^{A2}$  (ahsh) summon 4  $wt^{Aa2-A24}$  (oot/wet) embalm 5  $b\bar{s}(y)^{D26}$  (besh(ee)) spit 6  $pt^{N1}$  (pet) sky 7  $ftft^{D54}$  (fetfet) leap 8  $mk(y)^{A24}$  (mek(ee)) protect 9  $n^{D40}$  (nek) succor 10  $r^{Y1}$  (rek) know 11  $h3(y)^{D54}$  (hah(-ee)) descend 12  $b^{W3}$  (heb) festival 13  $t^{Y1}$ (ket) thing 14  $s^{G37}$  (kes) weak 15  $st^{B1}$  (set) woman 16  $sf^{N5}$  (sef) yesterday 17  $\bar{s}p^{D5}$  (shep) be blind 18  $q3(y)^{A28}$  (kah(-ee)) become high 19  $k3(y)^{A2}$  (kah(-ee)) think 20  $gr^{A2}$  (gher) become silent 21  $t(y)^{W22}$  (tek(ee)) become drunk 22  $b(y)^{S33}$  (cheb(ee)) be shod 23  $ds^{T30}$ (des) knife 24  $c^{P5}$  (jah) storm

C **1**  $3pd^{G38}$  (ahped) bird **2**  $j3w^{A30}$  (eeyah-oo) adoration **3**  $^cnd^{G37}$ (ahned) few **4**  $ws^{w10-Y1}$  (oosek /wesek) broad [the sign Wl0 has been transferred here from the word ws meaning "cup"] **5**  $bjn^{G37}$  (been) bad **6**  $psg^{D26}$  (peseg) spit **7**  $fnd^{D19}$  (fened) nose **8**  $ms^{13}$  (meseh) crocodile **9**  $ns^{G37}$  (nejes) little **10**  $rwj^{D54}$  (roowee) depart **11**  $hrw^{N5}$  (heroo) day **12**  $w^{c}$  (hooah) short **13**  $htm^{S20}$  (ketem) seal **14**  $rd^{A17}$  (kered) child **15**  $snf^{D26}$  (senef) blood **16**  $sr^{Y1}$  (seker) plan **17**  $šmm^{Q7}$  (shemem) become warm **18**  $qnj^{D32}$  (kenee) embrace **19**  $kkw^{N2}$  (kekoo) darkness **20**  $gr^{N2}$  (ghereh) night **21**  $tkn^{D54}$  (teken) approach **22**  $sm^{F27}$  (chesem) dog **23**  $dbn^{F46}$  (deben) go around **24**  $b^{c}$  D50 (jebah) finger

LESSON 3 (pp. 36–39)

#### EXERCISES IN TRANSCRIBING BILITERAL PHONOGRAMS

**A 1** wpwt^{A2} (wepwet/oopoot) message **2**  $^cd^{Y1}$  (ahd) safe **3**  $jw^{G37}$  (eeyoo) crime **4** wr (wer/oor) great **5**  $3w^{Y1}$  (ah-oo) long **6**  $jrw^{A53}$  (yiroo/eeroo) form **7**  $w3^{N31}$  (wah) far **8**  $3b^{D54}$  (ahb) tarry **9**  $js^{01}$  (yis/ees) tomb **10**  $wb^{F46-D54}$  (wejeb/oojeb) surround **11**  $jm^{A2}$  (yim/eem) moan **12**  $^c3^{Y1}$  (ah-ah) large **13**  $wn^{031}$   $^{-D40}$  (wen/oon) open **14**  $jnb^{036}$  (yineb/eeneb) wall

**B 1**  cY1  (ahj safe 2 jsft  G37  (isfet/yisfet) falsehood 3  $f3w^{114}$  (hefah-oo) snake 4  $Snmt^{N25}$  (senmet) a place-name 5 ms (mes) a particle 6  $mr(y)^{A2}$  (mer(ee)) love 7  $mnmnt^{E1-Z2}$  (menmenet) cattle 8  $m33^{D4}$  (mah-ah) see [in this word, the determinative (D4) appears exceptionally not at the end] 9  $p3^{Aa2}$  (kepah) navel 10  $b3k^{D40}$  (bahk) work (noun) 11  $Bdt^{049}$  (behdet) name of a town 12  $pr(y)^{D34}$  (per(ee)) go out 13  $dmj^{N23-Z1}$  (demee) town 14  $mrt^{A1-B1-Z2}$  (meret) servants 15  $m^{Y1}$  (meh) fill 16  $mt^{Y1}$  (meh) thick 17  $mt^{N1-B1}$  (mot) name of sky-goddess 18  $mt^{N23}$  ( $mt^{N23-Z1}$ ) ( $mt^{N23-Z1}$ ) ( $mt^{N1-B1}$ ) (

C 1  $mtwt^{D53-Z2}$  (metoot/metwet) semen 2  $jwms^{A2}$  (yoomes/eeyoomes) misstatement 3  $nw^{N5}$  (noo) hour 4  $mr^{G37}$  (mer) become sick 5 nb (neb) every 6  $Jmn^{A40}$  (yimen/eemen) Amon 7  $nm^{D19}$  (kenem) breathe 8  $qm3^{T14}$  (kemah) throw 9 nn (nen) these 10 p3 (pah) that (masculine) 11  $n^{N5}$  (neheh) eternity 12  $b3q^{M1}$  (bahk) a kind of tree 13  $nsr^{Q7}$  (neser) flame 14  $w^{A17}$  (wejeh/oojeh) wean 15  $nn^{A2}$  (nejnej) consult 16 wnn (wenen/oonen) be 17  $mšrw^{N2}$  (mesheroo) evening 18  $^cw3^{A24}$  (ahwah) rob 19  3   D1  (hah) back of head 20  $w3s^{S40}$  (wahs) sceptre 21  $mt^{B1}$  (hemet) woman 22  $^c3^{N31}$  (ah-ah) here 23  $ns^{G37}$  (henes) narrow 24  $jmt^{O1}$  (yimehet/ eemehet) netherworld 25  $ry^{N1}$  (heree) upper 26  $3b^{Z9-Y1}$  (ahbek) unite 27  $st^{A2}$  (heset) favor

**D** 1 N5 (hej) become white 2  $nw^{W22}$  (henoo) jar 3  $3^{c}$  D40 (khah-ah) throw 4 3q D40 (hahk) plunder 5 nt A24 (neket) strong 6  $n^{D40}$  (nej) save 7 3rt D3-B1 (kahret) widow 8  $nbt^{F51}$  (nehbet) neck 9  $nn^{A24}$  (kenen) disturb 10  $ums^{A21}$  (kenmes) friend 11 s3tw N23-Z2 (sahtoo) ground 12  $nw^{v1}$  (nooh) rope 13  $s3^{D61-D54}$  (sah, with h pronounced) approach 14  $wnwt^{N14}$  (wenoot/oonoot) hour 15  $jwsw^{U38}$  (eeyoosoo) scale 16  $sn^{A1}$  (sen) brother 17  $m(w)t^{B1}$  (met, moot) mother 18  $mjjt^{P5}$  (meheet) north-wind 19 sk(y) G37 (sek(ee)) wipe 20 mr V1-D40 (mer) bind 21  $s3d^{A24}$  (shahd) dig 22  $mjw^{E13}$  (meeyoo) cat 23  $sw^{G37}$  (shoo) empty 24  $prt^{D53-N33(x3)}$  (peret) seed (offspring) 25  $sn^{CD54}$  (shenah) repel 26  $sb^{A2}$  (sebeh) cry

E 1  $s\check{s}d^{V12}$  (seshed) bandage 2  $j\check{s}st^{A2}$  (yisheset/eesheset) what? 3  $qd^{W24-A35}$  (ked) build 4  $\check{s}nbt^{F51}$  (shenbet) breast 5  $k3t^{A9}$  (kaht) job 6  $\check{s}3s^{D54}$  (shahs) travel 7  $km^{Y1}$  (kem) complete 8  $snsn^{Y1}$  (sensen) fraternize 9  $gm^{D5}$  (ghemeh) catch sight of 10  $s3q^{I5-Y1}$  (sahk) gather 11  $t3\check{s}^{Z9-N23}$  (tahsh) boundary 12  $ntj^{A21}$  (kentee) statue 13  $3(y)^{A24}$  (chah(-ee)) seize 14  $t^{D54}$  (ket) throughout 15  $Tm^{A40}$  (Tem) Atum (the god) 16  $t^{S1}$  (hejet) white crown 17  $3m^{S28}$  (chahm) veil (verb) 18  $dr^{Cheher}$  leather 19  $33^{D1}$  (jahjah) head 20  $nm^{A24}$  (nehem) take away 21  $wj^{A26}$  (joowee) call upon 22  $jtrw^{N36-N23-Z1}$  (yiteroo /eeteroo) river 23  $msr^{F21}$  (mesjer) ear 24  $nsb^{A2}$  (neseb) lick 25  $snn^{A53}$  (senen) image 26  $nb(y)^{N35}$  (neb(ee)) swim 27  $swr(y)^{A2}$  (sewer(ee)) drink

# LESSON 4 (pp. 43-44)

#### EXERCISES IN TRANSCRIBING BILITERAL AND TRILITERAL PHONOGRAMS

**1**  $mntj^{P1}$  (mekentee) ferryman **2**  $št3^{Y1}$  (shetah) secret **3**  $štm^{A2}$  (shetem) be quarrelsome **4** gm(y) (ghem(ee)) find **5**  $3(y)^{A24}$  (chah(-ee)) seize **6**  $Kmt^{049}$  (kemet) Egypt **7**  $w3^{Y1}$  (wejah/oojah) become prosperous **8**  $k3^{D52\text{-E1}}$  (kah) bull **9**  $w^{039}$  (joo) mountain **10**  $add^{D5}$  (keded) sleep **11**^cn^{Y1} (ahnk) live **12**  $state{sheta}$   $tate{sheta}$  ( $tate{sheta}$ ) lie down **13**^{cc}  $tate{sheta}$   $tate{sheta}$ 

# LESSON 5 (p. 56)

#### **EXERCISE ON VARIATION IN SPELLING**

**1** pr (keper) become **2**  $c3^{YI}$  (ah-ah) great **3**  $tm^{S20}$  (ketem) seal **4** n (nej) ask **5** pr (keper) **6**  $c3^{YI}$  (ah-ah) **7** tm (ketem) **8** n (nej) **9** pr (keper) **10** c3 (ah-ah) **11** tm (ketem) **12** n (nej)

### LESSON 6 (p. 63)

#### EXERCISE ON TRANSPOSITIONS AND ABBREVIATIONS

1. c 2. f 3. h 4. b 5. g 6. d 7. a 8. e

#### EXERCISE IN LOCATING SIGNS

1. U30 **2.** N34 **3.** T2l **4.** Aal7 **5.** P8 **6.** F36 **7.** V16 **8.** M42 **9. 042 10.** F38 **11.** T3 **12.** V24 **13.** F3O **14.** V23 **15.** N36 **16. 039 17.** T3O **18.** T3l **19.** N33 **20.** D12 **21.** V1 **22.** Z7 **23.** Aall **24.** Aal5 **25.** M44 **26.** X2 **27.** Z8 **28.** N18 **29. 050 30.** V9

In what follows, only a single solution is usually provided.

### LESSON 8 (p. 88)

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

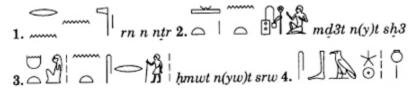


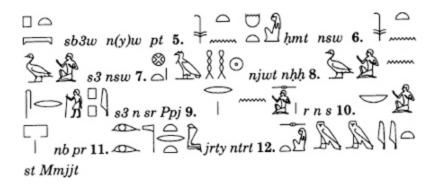
# LESSON 9 (pp. 94-95)

#### IDENTIFICATION OF WORDS, SENTENCES, CLAUSES, AND PHRASES

W = word; S = sentence; C = clause; P = phrase.

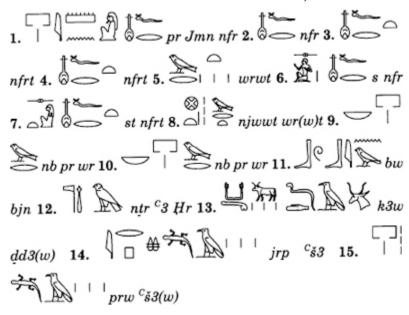
At night = P. my arrows = P. with my dagger = P. When it dawned = C. When it dawned Retenu came = S. He came = S. I having placed myself near him ["I" is added to mimic the Egyptian original] = C. near him = P. the women jabbered = S. another champion = P. his battle-axe and shield = P. his armful of missiles = P. toward me = P. I shot him = S. on his nose = P. his nose = P. over his back = P. while every Asiatic shouted = C. every Asiatic = P. The ruler A = P.



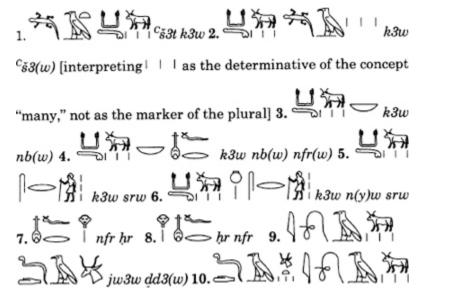


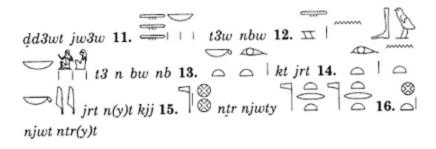
## **LESSON 10 (p. 104)**

TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN



# LESSON 11 (pp. 116–19)



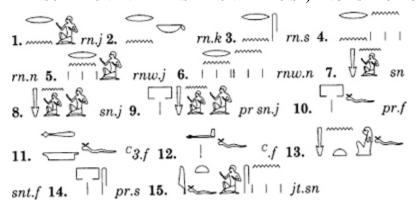


#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

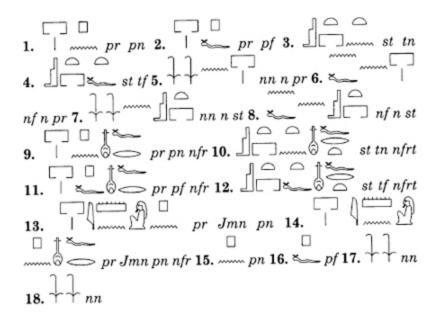
1. nr nfr the good god (god, good one) 2. q3w rulers 3. (n)qt beer 4. 3swt foreign lands 5. rw faces 6. mwt wives 7. rdwy (the two) legs 8. rdwy (the two) legs 9. snty (the) two sisters 10. snty (the) two sisters 11. nrwy (the) two gods 12. tr n 3w time of night 13. jqr srw who has excellent plans (excellent of plans) **14.** §3 3pdw who has many birds (many of birds) **15.** d3 jw3w whose oxen are fat (fat of oxen) 16. bw tpj the shoemaker tpj 17. r js entrance of the tomb 18. mt w^cb wife of the priest 19. mwt n(yw)t srw wives of the officials 20. qn nb every hero (every valiant one), but nb qn valiant lord (lord, valiant one) 21. nb wr great lord (lord, great one) 22. s3 jqr n bcw.fa scribe with dexterous fingers (scribe, excellent one of his fingers) 23. (n)qt nmt sweet beer 24. c nr flesh of the god 25. s3 s important person (son of a man) 26. kjj sp another time 27. nb t3wy lord of the Two Lands (that is, Egypt) 28. jrt r eye of Horus 29. s3 smsw eldest son 30. pr nsw palace (house of the king) 31. wt nr temple (abode of a / the god) 32. kt njwt another city 33. s n m3^ct man of truth 34. kjj nt another strong man 35. s3 w^cb the priest's son 36. t nbt bjnt wt every bad and evil thing 37. r n Kmt (the) Egyptian (language) 38. k3w w3w healthy bulls 39. wr wrw greatest one (great one of great ones), chief of chiefs 40. wr n wrw greatest one, chief of chiefs 41. bw jqr excellence 42. t nbt nfrt every good thing 43.t nb(t) everything 44. nrw nb(w) all the gods 45. q3 nhwt whose sycamore trees are high (high of sycamore trees) **46.** j3ww r rdw old people and children **47.** jnr qrs a sarcophagus of white stone (limestone) (white stone, a sarcophagus) 48. s3 R^c son of Re 49. mt nsw queen 50. d3bw j3rrt figs and grapes

# LESSON 12 (p. 141)

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

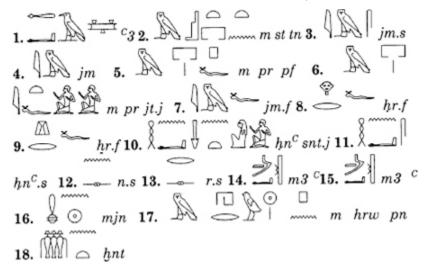


LESSON 13 (p. 146)

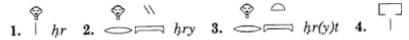


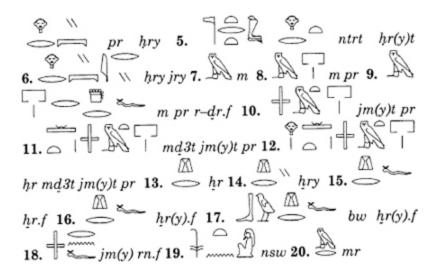
# LESSON 14 (p. 154)

TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN



# LESSON 15 (pp. 171–74)



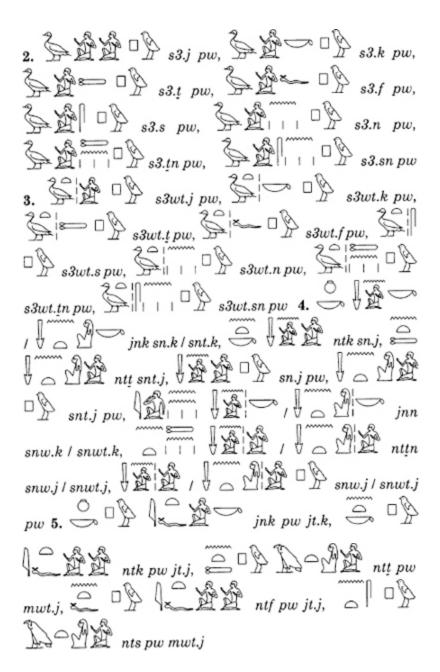


#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

1. *n.k* for you 2. *r.k* toward you 3. *rn.k* your (masc.) name 4. *r.j* my mouth 5. *r.j* towards me 6. *r pt* towards heaven 7. *r hp* according to the law 8. *jr(y)t.f* his duty 9. *jry* °3 door-keeper 10. *m st tn* in this place 11. *jm.s* in it 12. *jm* there 13. 3(ty) ° *jm(y) h3w.f* incumbent mayor 14. *jm(y)t.f* that which is in it 15. *jm(y)t pr* will 16. *r m(w) nr* chief of the priests 17. *jm(y) rn.f* list 18. *jm(y)t pr* will 19. *w* ° *jm.n* one from among you (plur.!) 20. *m*-c.sn through them 21. *r.f* his face 22. *r.f* on him 23. *r fnd.f* on his nose 24. *ry jry* their chief 25. *n* ° *f* with him 26. *pr.k* your house 27. *pr.k pn nfr* this beautiful house of yours 28. *js pn* this tomb 29. *q3 pn n Tnw* this ruler of *Tnw* 30. *nr pn* this god 31. *nr pf mn* that beneficent god 32. *nn* these things 33. *nn nrw* these gods 34. *w* ° *m nn sty* one from among these peasants 35. *Jnpw tp(y) w.f* Anubis who is on his mountain 36. *r Kmt* to Egypt 37. *r t.j* on my belly 38. *w pn n nsw* this order of the king 39. *t t3* throughout the land 40. *r(yt) nr* necropolis 41. *bw r(y).f* the place where he is 42. *m*-*q3b msw nsw* among the royal children 43. *r.f* under him 44. *mj q3 n 3st nbt* like the ruler of every land 45. *ft jry* accordingly 46. *m*-*b3.k* in your presence 47. *m st wrt m wmt nt* ° *m* on a throne in the gateway of electrum 48. *m*-*r(y)*-*jb.sn* in their midst 49. *sp 3 sp 4 n hrw* three or four times a day 50. *3sw tr(y)wt mj-qd.sn* all the upper (higher) lands

# LESSON 17 (pp. 210–13)



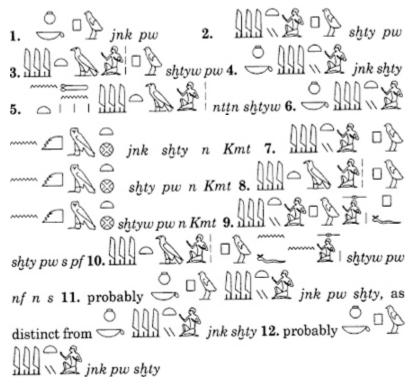


#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

1. *jnk nms n wrw* I am the friend of chiefs (great ones) [subst. sent., patt. 1] **2.** *jnk w^c nt n t3 pn* I am a hero (valiant one) of this land [subst. sent., patt. 1] **3.** *jnk s3 w^cb mj w^c jm.n nb* I am the son of a priest like each one of you (like one of you every) [subst. sent., patt. 1] *[s3 w^cb:* the genitive phrase ("son *of* priest") is *inferred* from *s3 + w^cb* "son + priest"] **4.** *ntk jt n nm* you are the father of the orphan [subst. sent., patt. 1] **5.** *ntk mw n t3 r-r.f* you are the steering-oar of the entire land [subst. sent., patt. 1] **6.** *jnk r s3 3st jw^cw n Wsjr* I am Horus son of Isis, the heir of Osiris. [subst. sent., patt. 1] **7.** *s3.j pw* it / he / that is my son [subst. sent., patt. 2] **8.** *s3 s pw* it / he is an important person (the son of a man) [subst. sent., patt. 2] **9.** *ntf nb jgrt he* is lord of the necropolis [subst. sent., patt. 1; not *nb jgrt pw!*] **10.** *ntf s3 Wsjr he* is the son of Osiris. [subst. sent., patt. 1] **11.** *wrww pw* they are wretched people (miserable ones) [subst. sent., patt. 2] **12.** *jnk pw* it is I / it's me [subst. sent., patt. 2] **13.** *ntf pw m m3^ct* it's really him (it is he in truth) [subst. sent., patt. 2] **14.** *jnk pw Wsjr* I am *Osiris* [subst. sent., patt. 3; not *jnk Wsjr!*] **15.** *jnk pw Šw* I am *Shu* [subst. sent., patt. 3; not *jnk Šw!*] **16.** ^c *3mw pw ms r mrjjt.f* Asiatics are a crocodile on his shore [subst. sent., patt. 2] **19.** *p3pw Wsjr* that is Osiris [subst. sent., patt. 3] **20.** *dpt m(w)t nn* this is the taste of death [subst. sent., patt. 1] **21.** *snt.f* 

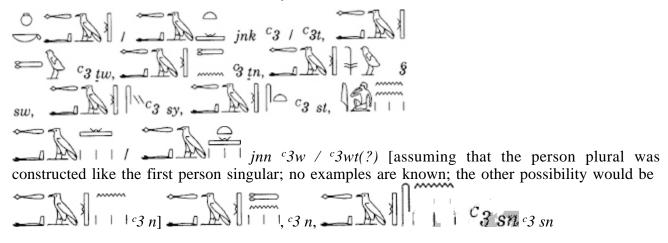
Spdt his sister is Sothis [subst. sent., patt. 1] **22.** mrwt.f mrwt.j his love is my love [subst. sent., patt. 1] **23.** mkt.j pw mkt.f my protection is his protection [subst. sent., patt. 3] **24.** mkt.t (mkt.) mkt R^c your (fem.) protection is the protection of Re [subst. sent., patt. 1] **25.** mkt.j mkt pt mkt.j mkt t3 my protection is the protection of heaven, my protection is the protection of earth [subst. sent., patt. 1] **26.** s3 sn.j pw he is the son of my brother [subst. sent., patt. 2] **27.** w3wt nw n(yw)t Wsjr these are the ways of Osiris [subst. sent., patt. 2, with pw declined]

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN



# LESSON 18 (pp. 220-23)

#### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN

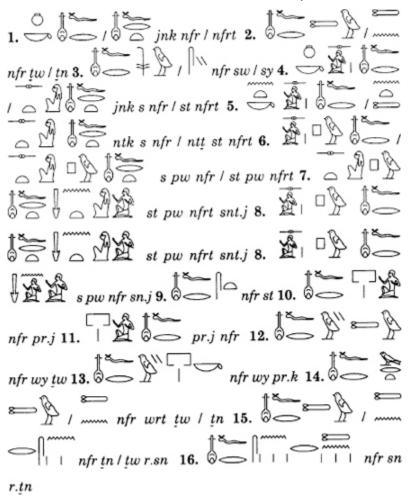


#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

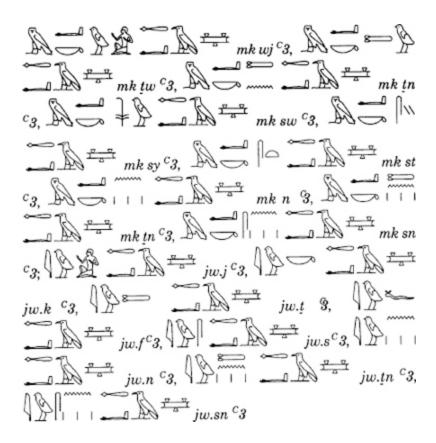
**1.**  $nfr \ mtn.j$  my way is good [adj. sent.] **2.**  $nm \ s.k \ mj \ R^c$  your smell is sweet like (that of) Re [adj. sent.] **3.**  $nfr \ w$  you are good / beautiful [adj. sent.] **4.**  $nfr \ w(y) \ w$  how beautiful / good you are! [adj. sent.] **5.**  $nfr \ wy \ nr \ pn$  how beautiful / good this god is! [adj. sent.] **6.**  $sy \ wy \ sw \ 3ty.tn$  how weak it is, your (plur.) heart! [adj. sent.] **7.**  $c \ s \ 3 \ st \ r \ t \ nbt$  it is more plentiful than anything [adj. sent.] **8.**  $dns \ tw$ 

r.j you are too heavy for me (you are heavy with regard to me) [adj. sent.] **9.** wr mnw.k r nsw nb your monuments are greater than (those of) all the (other) kings [adj. sent.] **10.** wr s(y) r m 2 it / she is larger than **2** cubits [adj. sent.] **11.** nfr st r t nbt it / this is better / more beautiful than anything [adj. sent.] **12.** jnk bnr n pr nb.f I am a sweet one of his lord's house [subst. sent., patt. 1] **13.** jnk cq3 mjty jwsw I am (an) accurate (one), the like of a scale [subst. sent., patt. 1, with mjty jwsw, a genitive phrase, in apposition to cq3 "accurate one"] **14.** jnk nfr cw I have beautiful ships (I am beautiful of ships) [subst. sent., patt. 1] **15.** jnk šw <m> 3w I am free <of> exaggeration [subst. sent., patt. 1] **16.** ntk jqr tp t3 you are (an) excellent (one) on earth [subst. sent., patt. 1; not jqr w (because of isolating contrast affecting ntk?] **17.** ntk mn mr(yt)-nr you are (an) efficient (one) in the necropolis [subst. sent., patt. 1; not mn w (because of isolating contrast?)] **18.** mk dr pw it is (a) bitter (one) [subst. sent, patt. 2; not dr sw it is bitter!] **19.** dns pw r b3kw it is (one) too heavy for the servants [subst. sent., patt. 2; not dns sw) **20.** 3w sw r.j m rn.fpw n Wsjr he is taller than me in that name of his of Osiris [adj. sent., with pw as demonstrative]

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN

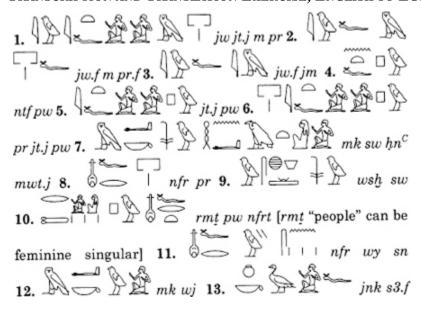


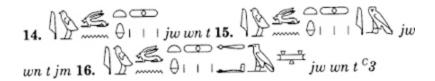
LESSON 19 (pp. 231-33)



#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

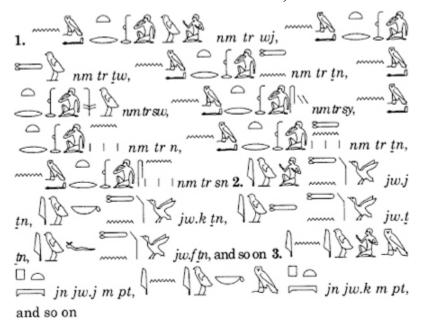
**1.**  $mk \ wj \ r-gs.k \ I$  am at your side [adv. sent.] **2.**  $mk \ wj \ m-b3.k \ I$  am in your presence [adv. sent.] **3.**  $mk \ w \ m \ st \ m3^c \ rw$  you are in the place of judgment (literally, the becoming true  $[m3^c \ as \ infinitive?]$  of voice) [adv. sent.] **4.**  $mk \ st \ ft-r.k$  it's in front of you [adv. sent.] **5.**  $mk \ nn \ nt \ hr \ st-r.k$  these matters are under your supervision [adv. sent.] **6.**  $rmw \ jm \ n^c \ 3pdw$  there are fish and fowl there [adv. sent.] **7.**  $jw \ d3bw \ jm.f \ hn^c \ j3rrt$  there are figs and grapes in it [adv. sent.] **8.**  $jw \ jt.f \ m \ pr \ nfr$  his father is in the Good House [adv. sent.] **9.**  $jw \ nw \ m \ sgr$  the palace was in silence [adv. sent.] **10.**  $jw.sny \ m \ pt$  they are both in heaven [adv. sent.] **11.**  $jw.jr \ t.j \ m-b3.f \ I$  am on my belly in his presence [adv. sent.] **12.**  $jw \ nswjjt \ t3wy \ r.k$  the kingship of the Two Lands (that is, Egypt) is with you [adv. sent.] **13**  $jw \ wn \ f3w \ r \ wpt \ w \ pf$  there is a snake on the top of that mountain [exist. sent.]





# LESSON 20 (pp. 246-48)

#### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN



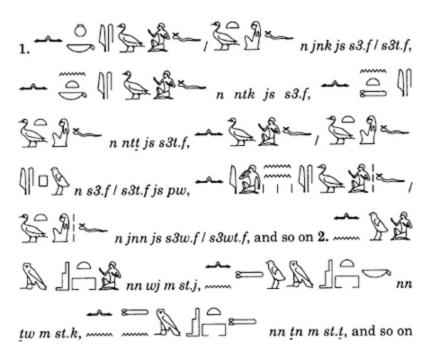
#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

**1.**  $jn \ jw.k \ r \ s \ n \ n$  will you live forever? (are you toward a man of eternity?) [adv. sent.] **2.**  $jnjw \ ntt \ mt$  are you a woman? [subst. sent., patt. 1] **3.**  $ptr \ rf \ sw$  who is he? [the pattern resembles that of the adj. sent.] **4.**  $jw.k \ tr \ r \ s(y) \ bw$  where are you going? (to which place are you?) [adv. sent.] **5.** n (for jn)  $ntf \ pw \ m \ m3^c t$  is it really him? (is it he in truth?) [subst. sent., patt. 2] **6.**  $m \ tr \ sn \ nn \ n \ rw \ jmyw-b3$  who are they, these ancient gods?  $m \ pw \ n^c \ Sj3$  they are Hu and Sia [the pattern resembles the adj. sent., with  $nn \ n \ rw$  in apposition to sn]

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN



LESSON 21 (pp. 261–63)

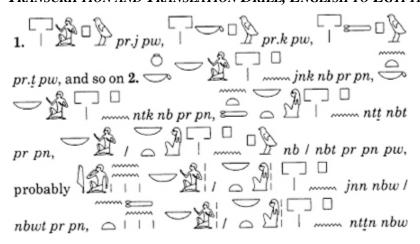


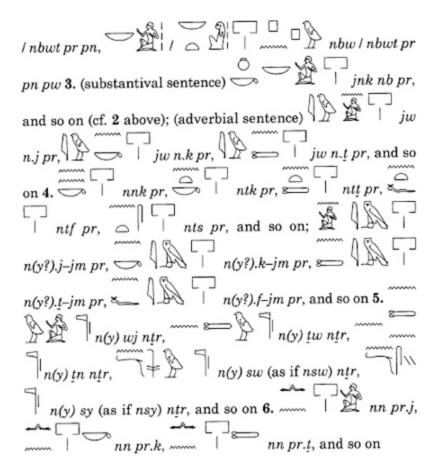
#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

1. *n jnk pw* it's not me [subst. sent., patt. 2] 2. *nn wj m-r(y)-jb.sn* I am not in their midst [adv. sent.] 3. *nn sw m st. f* it / he is not in its / his place [adv. sent.] 4. *nn ct jm.j šwt m nr* there is no limb in me free of a god [exist. sent.; perhaps *šwt* is not an adjective, but the third person feminine singular of a verb form called the stative conjugation (*šwt* for *šwtj*) with the meaning "(it) being free of the god," referring to "ct] 5. *ns pw n ws js pw* it is a narrow one, it is not a broad one [subst. sent., patt. 2] 6. *jrw.k pw n jrw.j js pw it* is your form, it is not my form [subst. sent., patt. 2] 7. "*šm.k pw n cšm.j js pw* it is your statue, it is not my statue [subst. sent., patt. 2] 8. *n s js rn.k Rc rn.k* your name is not "excrement," your name is "Re" [subst. sent., patt. 1] 9. *nn mwt.k nc.k* your mother is not with you [adv. sent.] 10. *nn wj nc.f* I am not with him [adv. sent.] 11. *nn wn nt m ht.f* there is no greed in his belly [exist. sent.] 12. *nn w3 m-r(y)-jb.sn* there is no fool in their midst [exist. sent.] 13. *nn qr n rk.j* there was no hungry one in my time [exist. sent.] 14. *nn mw jm* there is no water there [exist. sent.] 15. *mk rn.k pw* it is your name [subst. sent., patt. 2]



# LESSON 22 (pp. 295-300)



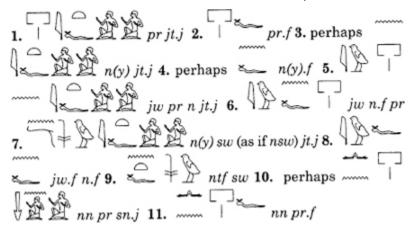


#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

**1.** jnk nb j3mt I have charm (I am the owner of charm) [subst. sent., patt. 1] **2.** n(y) wj pr Wsjr I belong to the house of Osiris (belonging am I to the house of Osiris) [adj. sent.] 3. nsy (for ny sy) jm(y)w-t  $R^c$  she belongs to the followers of Re (belonging is she to the followers of Horus) [adj. sent.] 4. nsw (for ny sw) Mnw he belongs to Montu (belonging is he to Montu) [adj. sent.] 5. nw (for ny wi) nr I belong to the god (belonging to the god am I) [adj. sent.] **6.** n(y?).nw (for n(y?).n wj?) I belong to you [adj. sent.?] 7. n(y)w s(y) ns (for ny sy) t.k it / she belongs to you(?), it / she belongs to your body [adj. sent.?] **8.** nnk pt nnk t3 mine is heaven, mine is the earth [adj. sent., nnk for ny jnk "belonging to me"?] **9.** ntk  cn  yours is life [adj. sent.?] **10.** n(y?).k-jm s(y) it is yours [adj. sent.?] **11.** jw.s n mwt.s she belongs to her mother / her mother owns her (she is to her mother) [adv. sent.] 12. jw.f n mwt.f he belongs to his mother [adv. sent.] 13. jw.f n Jmn he belongs to Amun [adv. sent.] 14. jw n.k 3w nm n mjjt the sweet breeze of the northwind belongs to you [adv. sent.] 15. jw n.s snb she has good health [adv. sent.] **16.** jw n.k gr the night belongs to you [adv. sent.] **17.** jw.f n.j he belongs to me [adv. sent.] **18.** mk sw n.k he belongs to you [adv. sent.] **19.** mk w n.f nsw you belong to him, O king [adv. sent.] **20.** nn n.k st it does not belong to you [adv. sent.] **21.** nn wn pwy.fy it / he has no end (there is not its / his end) [exist. sent.] 22. n wnt kft.f it / he has no wound [exist. sent.] 23. jnk s3 nb.n jw.n n.j I am the son of your (plur.) lord, you belong to me [subst. sent., patt. 1; adv. sent.] 24. jw w^ct n r kt n Wsjr jw n.j kt jnk mt.nw.sn one belongs to Horus, another to Osiris, (yet) another belongs to me, I am their third [adv. sent.; adv. sent., without repetition of jw; adv. sent.; subst. sent., patt. 1] **25.** (version A) jnk Šw n nrw nnk pt nnk t3 nnk jmyw.sn nnk t3 nr jnk q3 jw.j r jb.j pn I am Shu of the gods [subst. sent., patt. 1], mine is heaven [adj. sent.?], mine is the earth [adj. sent.?], mine are those that are in them [adj. sent.?], mine is the land of the god [adj. sent.?], I am the ruler [subst. sent., patt. 1], I am on this heart of mine(?) [adv. sent.]; (version **B**) w nrw pj N (N stands for a personal name) pn n(y?).f-jm pt n(y?).f<-jm>t3 n(y?).f<-jm> (pointed for brackets encompass words not in the original, but presumably to be restored) jmyw.sn n(y?).f-jm t3 nr q3.fpw jw N pn r jb.f pn this N is Hu (Authoritative Utterance or the like as a god) of the gods [subst. sent., patt. 3], his is heaven [adj. sent.?], his is the earth [adj. sent.?], his are those that are in them [adj. sent.?], his

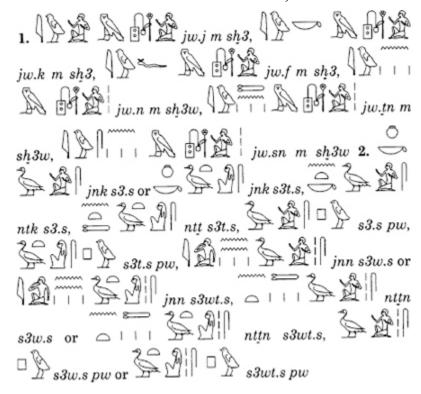
is the land of the god [adj. sent.?], he is its ruler [subst. sent., patt. 1], this N is on this heart of his(?) [adv. sent.] **26.**  $jn \ jw \ n.k \ \check{s}m^c.j \ r \ w3t$  will my barley be for you a road (this means: are you going to step on my barley?) [adv. sent.]

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN



## LESSON 23 (pp. 317-19)

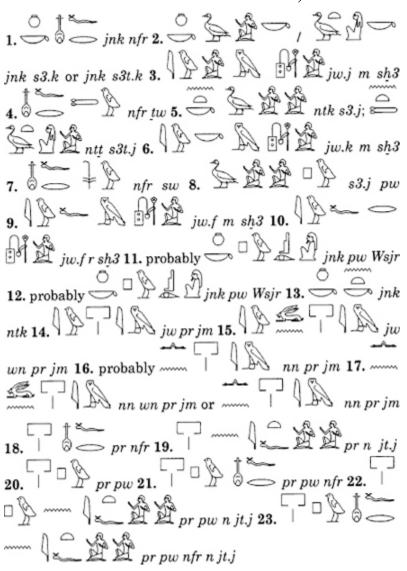
#### TRANSCRIPTION AND TRANSLATION DRILL, ENGLISH TO EGYPTIAN



#### TRANSCRIPTION AND TRANSLATION EXERCISE, EGYPTIAN TO ENGLISH

**1.** jw s3.f m nn his son is a child **2.** jw.f m nnw he is a child **3.** jw.f r j3w he will be an old man **4.** jw.f r smr m-m srw he will be a Friend among officials **5.** jw.f n.j r sn I will have him as a brother (he will be to me towards a brother) **6.** jw n3 m sb3jjt these matters are a teaching **7.** jb.j msnnw.j my heart is my companion **8.** jw Gb jm m s3.k Geb is your protection there **9.** jw. m nr you (fem.) are a god **10.** t3 pw nfr it is a beautiful land **11.** R^c pw s.f it is Re himself **12.** j3wt pw nfrt nswjjt kingship is a beautiful office **13.** Tm pw jmy jtn.f it is Atum who is in his sun-disk **14.** mk n grt hr bty.k we are under your (masc. sing.) sandals

#### TRANSCRIPTION AND TRANSLATION EXERCISE, ENGLISH TO EGYPTIAN



## LESSON 25 (pp. 363-65)

#### IDENTIFICATION OF SOUND PATTERN AND CONCEPT CLASS

1. nftft quinquiliteral, intransitive 2. m33 second-doubling, transitive 3. dg(y) third-weak, intransitive 4.  cc  triliteral, intransitive 5.  $^{c}n$  triliteral, intransitive 6.  $s^{c}n$  causative triliteral, transitive 7. wnn second-doubling, intransitive 8. wn biliteral, transitive 9. mdw third-weak, intransitive 10. d biliteral, transitive 11. jw(y) third-weak, intransitive 12. jn(y) third-weak, transitive 13. smn causative biliteral, transitive 14. ms(y) third-weak, transitive 15. sm biliteral, intransitive 16. mn biliteral, intransitive 17. rd(y) third-weak, transitive 18. wrr second-doubling, intransitive 19. c3 triliteral, intransitive 20. ms(y) fourth-weak, intransitive 21. pr triliteral, intransitive 22. s3 triliteral, transitive 23. s3 s4 triliteral, transitive 24. s5 s6 triliteral, transitive 25. s7 s7 triliteral, transitive 26. s8 triliteral, transitive 27. s9 triliteral, transitive 29. s9 triliteral, tr

## LESSON 26 (pp. 388-89)

#### EXERCISE IN IDENTIFYING INFLECTIONAL ENDINGS

Inflectional endings are marked in bold. One solution is given. More than one is mostly possible. One translation is added for each form.

1. jr. "may you (fem. sing.) do," suffix conjugation 2fs. 2. jr.tj "you (masc. sing.) having been made," stative conjugation 2ms. 3. jrt "she who has done," declension by adjectival endings fs. 4. mk n r jrt "(look,) you (fem. sing.) are doing," conjugation by dependent pronouns 2fs. 5. jr.ty.sy "she who will do," declension by third person suffix pronouns **fs**. **6.** *gm.t*(*y*).*sn* "they who will find," declension by third person suffix pronouns p. 7. gmw "those who have been found," declension by adjectival endings mp. 8. sk n r gmt "and that while we were finding," conjugation by dependent pronouns 1p. 9. gm.wyn "we having been found," stative conjugation 1p. 10. gm.n "may we find," suffix conjugation 1p. 11. jj.kw "I having come," stative conjugation 1s. 12. jw.k "when you (masc. sing.) come," suffix conjugation 2ms. 13. jw.j "when I come," suffix conjugation 1s. 14. jw (ending is **zero**) "he having come," stative conjugation **3ms**. **15.** *jw.t* "when you (fem. sing.) come," suffix conjugation **2fs. 16.** iw.t(y).s(y) "she who will come," declension by third person suffix pronoun **fs**. 17. mk sw r m33 "he sees," conjugation by dependent pronouns 3ms. 18. m33.f "when he sees," suffix conjugation 3ms. 19. wnn.s "that she will be," suffix conjugation 3fs. 20. wnn.ty.sy "she who will be," declension by third person suffix pronouns fs. 21. wn.s "may she be," suffix conjugation **3fs. 22.** mr.n "may you (plur.) love," suffix conjugation **2p. 23.** mrr.n "that you (plur.) love," suffix conjugation 2p. 24. ddt "what has been said," declension by adjectival endings fs. 25. šm.kw "I having gone," stative conjugation 1s.

## LESSON 27 (pp. 415-22)

#### Exercise in Identifying the Number of Inflectional Endings and the Number of E ntities

Inflectional endings are marked in bold. One solution is given for each verb form. More than one is mostly possible, especially if one considers zero as an inflectional ending. The first five solutions are more explicit. A possible translation is added for each verb form.

**1.** *ir.s* "may she do": (1) a. direct inflection only; (2) (2.2) b. single inflection (1); (2.3) b. 1; (3) (3.1) b. presence of person (conjugation); (4) (4.1) [b in (3.1)] a. suffix conjugation; (5) does not apply; (6) b. 1 entity; (7) 3fs. 2. jr.tj "you (masc. sing.) having been made": (1) a. direct inflection only; (2) (2.2) b. single inflection (1); (2.3) b. 1; (3) (3.1) b. presence of person (conjugation); (4) (4.1) [b in (3.1)] b. stative conjugation; (5) does not apply; (6) b. 1 entity; (7) 2ms. 3. mk sy r jrt "she is doing": (1) b. indirect and direct inflection combined; (2) (2.1) b. single inflection (1), (2.2) a. absence of inflection (0), (2.3) b. 1; (3) (3.1) b. presence of person (conjugation); (4) (4.1) [b in (3.1)] c. conjugation with dependent pronoun; (5) c. single + absence; (6) b. 1 entity; (7) 3fs. 4. jrt "she who has done": (1) a. direct inflection only; (2) (2.2) b. single inflection (1), (2.3) 1; (3) (3.1) a. absence of person (declension); (4) (4.1) [a in (3.1)] a. adjectival ending; (5) does not apply; (6) b. 1 entity; (7) fs. 5. jr.ty.sy "she who will do": (1) a. direct inflection only; (2) (2.2) b. single inflection(1); (3) (3.1)a. absence of person (declension); (4) (4.1) [a in (3.1)] b. declension with suffix pronoun; (5) does not apply; (6) b. 1; (7) fs. 6. tm (here taken as exhibiting absence of inflection) jr "to not do": (1) b; (2.1) a, (2.2) a, (2.3) a; (3), (4), and (5) do not apply; (6) a; (7) does not apply. 7. k3 jr.f "then he will do": (1) b; (2.1) a, (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) b; (6) b; (7) 3ms. **8.** iw.f r jrt "he will do": (1) b; (2.1) b, (2.2) a, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) b; (6) b; (7) 3ms. **9.** jw.f jr.f "he does": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (4.2) a. suffix conjugation; (5) d; (6) b; (7) 3ms, 3ms. 10. tmt.n.fjr "what he has not done": (1) b; (2.1) c, (2.2) a, (2.3) c; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (4.2) a. suffix conjugation; (5) e; (6) c; (7) fs, 3ms. **11.** wnt. n.f jr.f "what he used to do": (1) b; (2.1) c, (2.2) b, (2.3) d; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (4.2) a. suffix conjugation; (4.3) suffix conjugation (apparently always in [4.3]); (5) f; (6)c; (7) fs, 3ms, 3ms. 12. jw.k m33.k "you (masc. sing.) see": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (4.2) a. suffix conjugation; (5) d; (6) b (1 entity because parallel conjugation); (7) 2ms, 2ms. 13. jw.k r m33 "you (masc. sing.) will see": (1) b; (2.1) b, (2.2) a, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix

conjugation; (5) c; (6) b; (7) 2ms. **14.** jsk w m33.k "and that while you (masc. sing.) see": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] c. conjugation with dependent pronoun; (4.2) a. suffix conjugation; (5) d; (6) b; (7) 2ms, 2ms. **15.** mk w jw .t(j) "you (masc. sing.) have come": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] c. conjugation with dependent pronoun; (4.2) b. stative conjugation; (5) d; (6) b; (7) 2ms, 2ms. 16. mk sn.j jw (zero as inflection) "my brother has come": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation (here another reference to an entity alternating with suffix pronouns); (4.2) b. stative conjugation; (5) d; (6) b; (7) other reference to an entity equivalent to 3ms, 3ms. 17. wnt jr.8 "she who used to do": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (4.2) a. suffix conjugation; (5) d; (6) b; (7) fs, 3fs. 18. šm (zero as inflection) "who goes": (1) a; (2.2) b, (2.3) b; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (5) does not apply; (6) b; (7) ms. **19.** *šm.j* "when I go": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) does not apply; (6) b; (7) 1s. 20. mk sy šm.tj "she has gone": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] a. conjugation with dependent pronoun; (4.2) b. stative conjugation; (5) d.; (6) b; (7) 3fs, 3fs. 21. mk snt.j šm.tj "my sister has gone": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] a. conjugation with dependent pronoun (here another reference to an entity alternating with dependent pronouns); (4.2) b. stative conjugation; (5) d; (6) b; (7) reference to an entity equivalent to 3fs, 3fs. 22. šm.tj "she having gone": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] b. stative conjugation; (5) does not apply; (6) b; (7) 3fs. 23. šm.ty.fy "he who will go": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [a in (3.1)] b. declension with suffix pronoun; (5) does not apply; (6) b; (7) ms. **24.** *šm snt.j* "may my sister go": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation (here another reference to an entity alternating with suffix pronouns); (5) does not apply; (6) b; (7) another reference to an entity equivalent to 3ms. 25. š m.s "may she go": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) does not apply; (6) b; (7) 3fs. **26.** *šmt* "she who goes": (1) a; (2.2) b, (2.3) b; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (5) does not apply; (6) b; (7) fs. 27. šmwt "they (fem.) who go": (1) a; (2.2) b, (2.3) b; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (5) does not apply; (6) b; (7) fp. **28.** *int.n* "that which we will bring": (1) a; (2.2) c, (2.3) c; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (4.2) a. suffix conjugation; (5) does not apply; (6) c; (7) fs, 1p. 29. jnt.n.n "that which we have brought": (1) a; (2.2) c, (2.3) c; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (4.2) a. suffix conjugation; (5) does not apply; (6) c; (7) fs, 1p. **30.** *jnnt.n* "that which we bring": (1) a; (2.2) c, (2.3) c; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (4.2) a. suffix conjugation; (5) does not apply; (6) c; (7) fs, 1p. 31. jnn.sn "that they bring": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) does not apply; (6) b; (7) 3p. 32. jnnt "she who brings": (1) a; (2.2) b, (2.3) b; (3.1) a; (4.1) [a in (3.1)] a. adjectival ending; (5) does not apply; (6) b; (7) fs. 33. jn. "may you (fem, sing.) bring": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) does not apply; (6) b; (7) 2fs. **34.** mk sw m jwt "he is coming": (1) b; (2.1) b, (2.2) a, (2.3) b; (3.1) b; (4.1) [b in (3.1)] c. conjugation with dependent pronoun; (5) c; (6) b; (7) 3ms. 35. mk sw jw (zero as inflection) "he has come": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] c. conjugation with dependent pronoun; (4.2) b. stative conjugation; (5) d; (6) b; (7) 3ms, 3ms, 36, mk sn, i m iwt "my brother is coming"; (1) b; (2.1) b, (2.2) a, (2.3) b; (3.1) b; (4.1) [b in (3.1)] c. conjugation with dependent pronoun (here another reference to an entity alternating with dependent pronouns); (5) c; (6) b; (7) reference to an entity equivalent to 3ms. 37. mk sn.j jw (zero as inflection) "my brother has come": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] c. conjugation with dependent pronoun (here another reference to an entity alternating with dependent pronouns); (4.2) b. stative conjugation; (5) d; (6) b; (7) reference to an entity equivalent to 3ms, 3ms. 38. pr.kw "I having become": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] b. stative conjugation; (5) does not apply; (6) b; (7) 1s. **39.** pr.k "may you (masc. sing.) become": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) does not apply; (6) b; (7) 2ms. **40.** pr.wyn "we having become": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1)[b in (3.1)] b. stative conjugation; (5) does not apply; (6) b; (7) 1p. **41.** r.n d.n "then you (plur.) say": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b, (conjugation (as always); (4.1) [b in (3.1] a. suffix conjugation; (4.2) a. suffix conjugation; (5) d; (6) b (parallel conjugation); (7) 2p, 2p. 42. jsk n d. "and that while you (fem. sing.) say": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in 3.1)] c. conjugation with

dependent pronoun; (4.2) b. suffix conjugation; (5) d; (6) b; (7) 2fs, 2fs. **43.** *d.r.n* "then you (plur.) say": (1) a; (2.2) b, (2.3) b; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (5) does not apply; (6) b; (7) 2p. **44.** *mk n r d* "you (plur.) are saying": (1) b; (2.1) b, (2.2) a, (2.3) b; (3.1) b; (4.1) [b in (3.10)] c. conjugation with dependent pronoun; (5) c; (6) b; (7) 2p. **45.** *jw. d.* "you (fem. sing.) say": (1) b; (2.1) b, (2.2) b, (2.3) c; (3.1) b; (4.1) [b in (3.1)] a. suffix conjugation; (4.2) a. suffix conjugation; (5) d; (6) b; (7) 2fs, 2fs.

## LESSON 29 (p. 447)

#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Stems are underlined (except to avoid conflict with diacritic mark). Inflection is marked in bold.

1. <u>wnn.f</u> "that he is": Type 1 gemination. 2. <u>m3.k</u> "may you (masc. sing.) see": absence of Type 1 gemination. 3. "who (mas. sing.) gives" (inflection is zero): Type 1 gemination; absence of r.

4. <u>jr.n</u> "may you (plur.) do": absence of Type 1 gemination. 5. <u>wddt</u> "what has been ordered": presence of Type 2 gemination. 6. <u>rd.kw</u> "I having been given": absence of Type 1 gemination; presence of r. 7. <u>ddt</u> "that which has been said": presence of Type 2 gemination. 8. <u>stp.</u> "may you (fem. sing.) choose": no components. 9. <u>f</u> "may he give": absence of Type 1 gemination; absence of r. 10. <u>mr.s</u> "may she love": absence of Type 1 gemination.

## LESSON 30 (pp. 458-59)

#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Stems are underlined (except to avoid conflict with diacritic mark). Inflection is marked in bold.

1. <u>irijis</u> "may she do": absence of Type 1 gemination; "weak" consonant is absence of Type 1 gemination; absence of r. 3. <u>iwt</u> f "may he come": absence of Type 1 gemination; general infix ... t. 4. <u>ir.n sn.j</u> "that my brother has done": absence of Type 1 gemination; general infix ... n. 5. m iwt "(in) coming": absence of Type 1 gemination; singular substantival ending ... t; preposition ... m. 6. <u>rd.n.tw.f</u> "that he was given": absence of Type 1 gemination; presence of ... r; general infixes ... n and ... tw. 7. <u>d.jn.f</u> "then he said": general infix jn. 8. <u>jr.tj</u> "she having been made": absence of Type 1 gemination. 9. rd "saying": preposition ... hr.

10. <u>dtj.s</u> "what she will say": "weak" consonant ... j attached to feminine ending t. 11. <u>jrw k</u> "that you (masc. sing.) will do"; absence of Type 1 gemination; "weak" consonant ... w. 12. <u>m3n.</u> "may you see": absence of Type 1 gemination; general infix ... n. 13. <u>stp.t.f</u> "that which he chooses"; general infix ... t. 14. r <u>irt</u> "being about to do"; absence of Type 1 gemination; singular substantival ending ... t; preposition ... r. 15. <u>m33w</u> "he who is seen": presence of Type 1 gemination; "weak" consonant ... w. 16. <u>jw.k3.n:</u> "then you (plur.) will come": absence of Type 1 gemination; general infix ... so the world in the consonant ... then you (plur.) will come": absence of Type 1 gemination; general infix ... so the world infix ... then you (plur.) will come": absence of Type 1 gemination; general infix ... so the world infix ... then you (plur.) will come": absence of Type 1 gemination; general infix ... then you (plur.) will come": absence of Type 1 gemination; general infix ... then you (plur.) will come": absence of Type 1 gemination; general infix ... then he was brought": absence

of Type 1 gemination; general infixes r and r tw. **20.** gmij.s "whom (masc. sing.) she will find": absence of Type 1 gemination; "weak" consonant r jj.

## LESSON 31 (pp. 467–68)

#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

Stems are underlined (except to avoid conflict with diacritic mark). Inflection is marked in bold.

1. jw.j jj.kw "I have come": absence of Type 1 gemination; non-verbal auxiliary .f "may he say": no components can be observed. 3.  $cc.n \underline{d.n.s}$  "then she said": verbal auxiliary ...... n; general infix ...... n; general infix ...... n. 4.  $\underline{irt}.n.k$  "that which you (masc. sing.) you have done": absence of Type 1 gemination; general infix ...... n. 5. jr.n.tw.k "that you (masc. sing.) have been made": absence of Type 1 gemination; general infixes ...... n and tw. 6. wnn.s r <u>irt</u> "that she will do": absence of Type 1 gemination; singular substantival ending  $\triangle$  t; preposition | r; verbal auxiliary  $\frac{1}{m}$  | wnn.s, which itself exhibits gemination Type 1. 7. cc.n .s  $^{c}h^{c}.ti$  "then she rose": verbal auxiliary  $\Upsilon$ 'chc.n.s, which itself contains the general infix n. 8. jw.s m jwt "she is coming": absence of Type 1 gemination; singular substantival ending  $\triangle t$ ; jw.s. **9.** k3.f <u>ir.f</u> "then he will do": absence of Type preposition  $\xrightarrow{A}$  m; non-verbal auxiliary k3.f. 10. tm.n jr "that you (plur.) do not do": 1 gemination; non-verbal auxiliary tm.tn. 11. mk w jj.tj "vou (masc. absence of Type 1 gemination; verbal auxiliary sing.) have come": absence of Type 1 gemination;  $M \longrightarrow mk$ , particle triggering the use of w. 12. ir.k3.f "then you (masc. sing.) will dependent pronouns as conjugation, in this case do": absence of Type 1 gemination; general infix  $\mathbb{N}$  k3. 13. wn.jn.f r <u>šm</u>t "then he went": singular substantival ending  $\triangle t$ ; preposition r; verbal auxiliary  $\sim$ itself contains absence of Type 1 gemination and the general infix iw.f. 15. cc.n.f iw (zero) "then he came": absence of is chosen": non-verbal auxiliary Type 1 gemination; verbal auxiliary T Y cc.n.f which itself exhibits the general infix n. 16. n gm.n.n "you (plur.) do not find": absence of Type 1 gemination; general infix ...... n; negation - n, an element that can be a <u>gm.n.</u>nssociated with auxiliaries (§ 5.235). 17. jw <u>jr.n.j</u> "I have done": absence of Type 1 gemination; general infix _____ n; non-verbal auxiliary wnn.tv.sy "she who will be": presence of Type 1 gemination; general infix \\\\ ty. 19. jw.f grt <u>ir.f</u> "he

does": absence of Type 1 gemination; non-verbal auxiliary  $\iiint \sum_{i=1}^{n} jw.f.$  20.  $\underbrace{hpr.f}$  "may he become": no components can be observed.

## LESSON 33 (p. 498)

#### EXERCISE IN TRANSCRIPTION AND DISCUSSION OF VERB FORMS

1.  $wn.jn.f \ r \ stp$  "then he chose": (a) exhibits five component types, namely (i) the singular substantival ending zero in stp, (ii) the preposition r, (iii) the verbal auxiliary wn.jn.f, which contains itself (iv) absence of gemination Type 1 in wn and (v) the general infix jn; (b) one type follows the stem, namely the singular substantival ending zero in stp, whereas the other four types precede the stem. 2.  $^{cc}.n \ stp.n.f$  "then he chose": (a) exhibits two component types, namely (i) the verbal auxiliary  $^{cc}.n$  and (ii) two instances of the general infix n; (b) the auxiliary and one of the two instances of the infix n precede the stem, whereas the other instance of n follows the stem. 3. jw stp.n.f "he has chosen": (a) exhibits two component types, namely (i) the general infix n and (ii) the non-verbal auxiliary jw; (b) the auxiliary jw precedes the stem whereas the general infix n follows the stem.

## LESSON 34 (pp. 517-18)

#### EXERCISE IN TRANSCRIPTION AND DISCUSSION OF VERB FORMS

**1.** *jw.f grt stp.f* "he chooses": auxiliary *jw.f* is separated from the stem *stp* by the enclitic particle *grt*. 2. jw.f stp.f "he chooses": the verb form in no. 1 shows that there is a space between jw.f and stp.f, which is not filled in this instance. 3. jw grt sn.j stp.f "my brother chooses": the auxiliary jw is separated from both its inflection sn.j and the stem stp. 4. jw sn.j stp.f "my brother chooses": no. 3 reveals that there is a space between jw and sn.j, which is here unfilled. 5. stp.f grt "may be choose": an enclitic particle cannot separate suffix conjugation, in this case f, from the stem. 6. stp grt sn.j "may my brother choose": an enclitic particle can separate another reference to an entity alternating with suffix conjugation from the stem, in this case sn.j. 7. stp sn.j "may my brother choose": no. 6 reveals that there is a space between stp and sn.j, in this case unfilled. 8. jw grt stp.n sw sn.j "my brother has chosen him": the enclitic particle can separate an auxiliary from the stem, as grt separates jw from stp.n here, but an enclitic pronoun, here sw, cannot; instead, an enclitic pronoun can separate the stem, with infix attached, from a reference to an entity alternating with suffix conjugation, here sn.j. 9. jw grt stp.n n.j sw sn.j "my brother has chosen him for me": as distinct from no. 8, two enclitic pronouns instead of one separate stp.n from sn.j, namely both n.j and sw. 10. jw stp.n sw sn.j "my brother has chosen him": no. 9 reveals that there is a space between jw and stp.n and between *stp.n* and *sw*, which is here unfilled.

## LESSON 35 (pp. 533-34)

#### EXERCISE IN TRANSCRIPTION AND IDENTIFICATION OF VERB FORMS

As elsewhere, one possible translation is provided for each verb form.

1. jw.j r.kw "I know": the verb form is associated with the active voice; the stative of the verb r "know" is exceptionally associated with the active voice, whereas the stative of just about every other verb is associated with the passive voice. 2. jw.j stp.kw "I am chosen": the verb form is passive, because the stative of just about every verb is associated with the passive voice. 3. nn tm.f jr "he will not fail to do": the verb form exhibits two negations, nn and tm, and is therefore in effect affirmative since the two negations cancel each other. 4. jw.s grt d.tw.s "it is given": the general

infix tw always marks the passive voice. 5. ddt "what has been said": gemination Type 2 always marks the passive voice. 6. n jr.j "I have not done": the verb form exhibits the negation --- n and is therefore negated. 7. stp.n.tw.f "that he has been chosen": the verb form is passive because it exhibits the general infix tw. 8. jw. j šm.kw "I have gone": the verb form is not passive, but neither is it active because verbs of motion cannot be passive and therefore by contrast not active; but verb forms of verbs of motion can be associated with the active voice. 9. n-sp wn.j "I have never been": the verb form contains the negation n-sp and is therefore. 10. šm.n.j "that I have gone": as noted in no. 8, verb forms of verbs of motion are neither active nor passive, but they can all be associated with the active voice. 11. n jj.n.fjs "it is not (in this or that circumstance) that he has come": one observes the negation n ... js; however, for reasons that will be explained in Part 2 of this grammar, the verb form is nevertheless active. 12. nn d.j "I will not give": the verb form exhibits the negation nn and is therefore negated. 13. *ir.tw.f* "while he is made": the infix tw always marks the passive voice. 14. m rd "do not give": m is a negation and the verb form therefore negated. 15. nn d.tw.k "you will not be given": the verb form is negated, as appears from the negation nn; it is also passive, as appears from the general infix tw. 16. n-sp jrjj.j "I have never done": the negation n-sp makes the verb form negated. 17. tm rd "who has not given": the negation tm makes the verb form negated. 18. nn m3n.k "you (masc. sing.) will not see": the negation nn makes the verb form negated. 19. m jr "do not do": the negation m makes the verb form negated. 20. jm.k jr "may you not do": the negation jm.k makes the verb form negated.

## LESSON 36 (p. 563)

#### Exercise on the Use and Translation of Substantival Verb Forms

1. hrw mswt day of birth; hrw dd.f the day on which he gives (literally, the day of that-he-gives). 2. hrw n mswt day of birth; hrw n dd.f the day on which he gives (literally, the day of that-he-gives). 3. m pr.f in his house; m dd.f when he gives (literally, in that-he-gives). 4. rn.f Ppj his name is Ppj; dd.f dd.s when he gives she gives (literally, that-he-gives means that-she-gives). 5. sn.j pw it is my brother; dd.f pw it means that he gives. 6. jšst pw mdt tn what is this thing?; jšst pw dd.f what does it mean that he gives? 7. qsn mswt giving birth is difficult; qsn dd.f he gives with difficulty (literally, that-he-gives is difficult). 8. mk jt.j m pr.f my father is in his house; mk dd.f m pr.f it is in his house that he gives (literally, that-he-gives [is] in his house).

#### **APPENDIX III**

#### COMPLETE SURVEY OF THE COORDINATES OF THE VERB (CHAPTER FIVE)

What follows is a list of all the options from which one needs to choose in order to identify verb forms completely. These lists have already been provided in Chapter Five. They are united here for the sake of convenience and for ease of reference. The type of analysis underlying the list was first proposed in this author's *Catalogue of Coordinates and Satellites of the Middle Egyptian Verb* (Leuven: Peeters Publishers 1996). The analysis is based on the simple observation that a verb form is not a *thing* but a *cluster* of things. The arrangement of options proposed in the *Catalogue* has been altered here in some ways, hopefully to good advantage.

For Dimension **1**, see §§ 5.39–57, pp. 348–54 For Dimension **2**, see §§ 5.58–73, pp. 355–65 For Dimension **3**, see §§ 5.74–163, pp. 366–422 For Dimension **4**, see §§ 5.164–319, pp. 423–518 For Dimension **5**, see §§ 5.320–31, pp. 519–24 For Dimension **6**, see §§ 5.332–46, pp. 525–34 For Dimension **7**, see §§ 5.347–75, pp. 535–52 For Dimension **8**, see §§ 5.376–88, pp. 553–63

## I THE FIRST DIMENSION: SOUND PATTERN CLASS OF THE ROOT

- 1. triliteral verbs
  - **1.1.** strong verbs
  - 1.2. third-weak verbs
  - **1.3.** second-doubling verbs
- 2. biliteral verbs
- 3. other sound pattern classes

# II THE SECOND DIMENSION: CONCEPT CLASS OF THE ROOT

- 1. transitive verbs
- **2.** intransitive verbs
  - **2.1.** verbs of motion
  - **2.2.** adjective verbs
  - **2.3.** other intransitive verbs

## III THE THIRD DIMENSION: INFLECTION

## Abbreviations

 $P = person \hspace{1cm} 1 = first \hspace{0.1cm} person \hspace{1cm} G = gender \hspace{1cm} m = masculine \\ 2 = second \hspace{0.1cm} person \hspace{1cm} f = feminine \\ 3 = third \hspace{0.1cm} person \hspace{1cm} N = number \hspace{1cm} s = singular \\ p = plural$ 

- 1. direct inflection only (verb forms without auxiliary)
  - **1.1.** absence of inflection
  - 1.2. single inflection
    - **1.2.1.** conjugation (PGN or PN)
      - 1.2.1.1. suffix conjugation

1s 2ms 2fs 3ms 3fs lp 2p 3p

**1.2.1.2.** stative conjugation

1s 2s 3ms 3fs lp 2p 3mp 3fp

- **1.2.2.** declension (GN or N)
  - **1.2.2.1.** declension by adjectival endings

ms fs mp fp

**1.2.2.2.** declension by third person suffix pronouns

ms fs p

**1.3.** double inflection

(declension by adjectival endings + suffix conjugation)

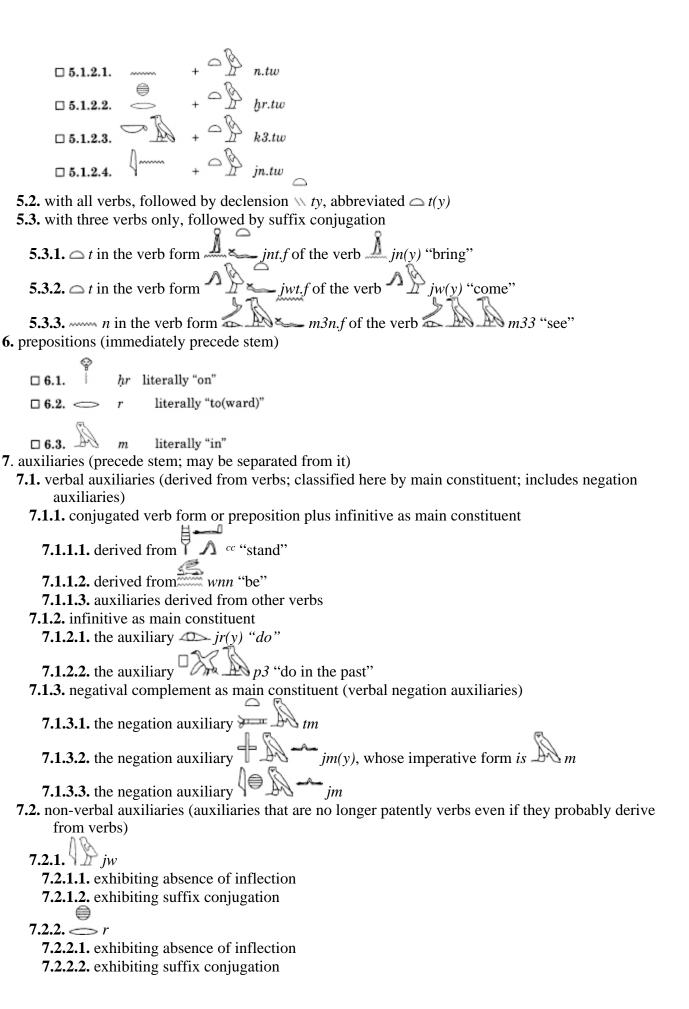
- 2. indirect and direct inflection combined (with auxiliary)
  - **2.1.** absence of inflection + absence of inflection
  - **2.2.** absence of inflection + single inflection
    - **2.2.1.** absence of inflection + suffix conjugation
    - **2.2.2.** absence of inflection + stative conjugation
  - **2.3.** single inflection + absence of inflection
    - **2.3.1.** conjugation + absence of inflection
      - **2.3.1.1.** suffix conjugation. + absence of inflection
      - **2.3.1.2.** stative conjugation + absence of inflection
      - **2.3.1.3.** conjugation by depend. pron. + absence of inflection 1s 2ms 2fs 3ms 3fs 3s ("it") 1p 2p 3p
    - **2.3.2.** declension + absence of inflection
      - **2.3.2.1.** declension by adject. endings + absence of inflection
      - **2.3.2.2.** declension by 3s/3p suff. pron. + absence of inflection
  - **2.4.** single inflection + single inflection
    - **2.4.1.** parallel conjugation (conjugation + conjugation)
      - **2.4.1.1.** suffix conjugation + suffix conjugation
      - **2.4.1.2.** conjug. by depend. pronouns + suffix conjugation
      - **2.4.1.3.** suffix conjugation + stative conjugation
      - **2.4.1.4.** conjug. by depend. pronouns + stative conjugation
      - **2.4.1.5.** stative conjugation + stative conjugation
    - **2.4.2.** parallel inflection (declension + conjugation)
      - **2.4.2.1.** declension by adject. endings + suffix conjugation
      - **2.4.2.2.** declension by adject. endings + stative conjugation
  - **2.5.** double inflection + absence of inflection
  - **2.6.** double inflection + single inflection

or, declension + conjugation + conjugation or, declension + parallel conjugation

## IV THE FOURTH DIMENSION: COMPONENTS

( unobservable components vowels length short long

## unstressed stress stressed double consonants pause (immediately precedes the stem) absence of a pause presence of a pause) 1. gemination (in stem) **1.1.** Type 1 (conjugation, declension, absence of inflection) **1.1.1.** non-geminating **1.1.2.** geminating verb form verb form **1.2.** Type 2 (conjugation) **1.3.** Type 3 (declension) 2. absence or presence of r in rd(y) "give" (beginning of stem) **2.1.** absence of < > r3. "weak" consonants (end of stem) 3.1. D, Cw **3.1.1.** in verb forms exhibiting absence of inflection **3.1.2.** in verb forms exhibiting conjugation **3.1.3.** in verb forms exhibiting declension **3.1.4.** in verb forms exhibiting double inflection **3.2.1.** in verb forms exhibiting conjugation **3.2.2.** in verb forms exhibiting declension **3.2.3.** in verb forms exhibiting double inflection **3.3.** j in $\bigcup tj$ **3.3.1.** in verb forms exhibiting declension **3.3.2.** in verb forms exhibiting double inflection **4**. singular substantival ending (end of stem) **4.1.** masculine singular: absence of ending **4.2.** feminine singular: $\triangle t$ 5. infixes (between stem and inflection) **5.1.** with all verbs, followed by suffix conjugation **5.1.1.** single infix □ 5.1.1.1. n (also double inflection) □ 5.1.1.2. □ 5.1.1.3.





- **7.2.3.1.** exhibiting absence of inflection
- **7.2.3.2.** exhibiting suffix conjugation

Elements that can be associated with auxiliaries: 7.3 and 7.4

**7.3.** other negations □ **7.3.1**.

□ 7.3.7. w very rare; follows the stem!

**7.4.** particles triggering the use of dependent pronouns as conjugation, such as  $M \longrightarrow mk$ 

#### V THE FIFTH DIMENSION: NEGATION

- 1. absence of a negation word (affirmative verb form)
- 2. presence of a negation word (negated verb form)

#### VI THE SIXTH DIMENSION: VOICE

- 1. presence of voice (verb forms of transitive verbs except the stative)
  - **1.1.** active voice
  - 1.2. passive voice
- 2. absence of voice
  - **2.1.** associated with the active voice
    - **2.1.1.** in the first degree
      - (1) verb forms of intransitive verbs except the stative
      - (2) the stative of r "know"
    - **2.1.2.** in the second degree the stative of intransitive verbs
  - **2.2.** associated with the passive voice (in the first degree) the stative of transitive verbs, except that of r "know"

#### VII THE SEVENTH DIMENSION: TIME

- 1. verb forms without tense
  - **1.1.** infinitive

- **1.2.** imperative and others
- 2. verb forms with tense
  - **2.1.** absolute tenses
    - **2.1.1.** non-contingent tenses
      - **2.1.1.1.** non-preterite tenses
        - **2.1.1.1.** past tense
        - **2.1.1.1.2.** present tense
        - **2.1.1.3.** future tense
        - **2.1.1.1.4.** aorist tense
      - **2.1.1.2.** preterite tenses
        - **2.1.1.2.1.** past in the past
        - **2.1.1.2.2.** present in the past
        - **2.1.1.2.3.** aorist in the past
    - **2.1.2.** contingent tenses
      - **2.1.2.1.** aorist contingent tense
      - **2.1.2.2.** future contingent tense
      - **2.1.2.3.** past contingent tense?
  - **2.2.** relative tenses (subordinated or dependent verb forms)
    - **2.2.1.** past in relation to another tense
    - **2.2.2.** aorist/present in relation to another tense
    - **2.2.3.** future in relation to another tense

### VIII THE EIGHTH DIMENSION: FUNCTION

- 1. independent
- 2. dependent
  - **2.1.** nominal (referring to entities)
    - **2.1.1.** substantival (referring to entities only)
    - **2.1.2.** adjectival (referring to entities and properties)
  - **2.2.** adverbial (referring to circumstances)

## APPENDIX IV ERRATA IN CATALOGUE OF COORDINATES (1996)

What follows are corrections to the present author's *Catalogue of Coordinates and Satellites of the Middle Egyptian Verb* (Leuven: Uitgeverij Peeters 1996).

page <b>xii</b> , line <b>4</b> :	for	"Excursus of §§ 137–44"
	read	"Excursus to §§ 137–44" (as on p. 121)
page <b>xxi</b> , line <b>8</b> :	for	"pp. 223–39"
	read	"pp. 221–36"
page <b>28</b> , line <b>22</b> :	for	"ENTITIES REFERRING TO"
	read	"ENDINGS REFERRING TO"
page <b>66</b> , line <b>5</b> :	for	"ENTITIES REFERRING"
	read	"ENDINGS REFERRING"
page <b>161</b> , line <b>10</b> :	for	"he who is loved"
1 6	read	"those who are loved"
page <b>171</b> , line <b>10</b> :	for	"of the latter two"
,	read	"of the first two"
page <b>173</b> , lines <b>23–24</b> .	for	"the Simple Past ("he did," "he had done," "he
,	v	would do")"
	read	"the Simple Past ("he did") and the Pluperfect ("he
		had done")"
page <b>173</b> , line <b>25</b> :	for	"he had done"
	read	"he has done"
page <b>195</b> , line <b>14</b> :	for	"they occur"
-	read	"they can occur"
page <b>211</b> , line <b>18</b> :	for	"Depuydt 1994a"
-	read	"Depuydt 1995b"
page <b>212</b> , line <b>1</b> :	for	"Depuydt1994a"
	read	"Depuydt 1995b"
page <b>214</b> , line <b>22</b> :	for	"1994a"
	read	"1995b"
page <b>221</b> , line <b>12</b> :	for	"one of two the"
	read	"one of the two"
page <b>225</b> , line <b>10</b> :	for	"part the"
	read	"part of the"
page <b>234</b> , line <b>10</b> :	for	"Depuydt 1994"
	read	"Depuydt 1995b"

# APPENDIX V GRAMMATICAL TERMS AND THEIR DEFINITIONS

#### **Preliminary Remarks**

There is much disagreement as to how language is best described. This grammar is hardly the place to engage this vast debate. One cannot even expect the potential readers of this work to be familiar with the controversy. In fact, this work assumes no prior knowledge whatsoever of grammar or of the grammar of any language. It is designed to be fully self-sufficient. Grammatical terminology is chosen and designed to be as compact and parsimonious as possible. The following list of technical terms and their definitions is not overly long. But it completely covers the grammar. No other technical terms are used.

In choosing terms, an attempt has been made throughout this grammar to achieve complete overlap between three things: terms, definitions, and phenomena. One term is used for each observed phenomenon and one definition for each named phenomenon. One term, one definition, one phenomenon.

In introducing any term X in grammatical work of any kind, it seems like a useful discipline to produce instantly a simple one-sentence statement in the format "X is...," exhaustively defining the term X. This has mostly been done in this grammar, but not always. The following list makes up for this.

Not every single last term has been defined. There are some exceptions. These exceptions can be classified in four categories.

First, some of the most obvious terms are not defined. Thus, it is assumed that everyone knows what a question is or what a negation is.

Second, terms describing hieroglyphic *writing* are included in the list only when they are relevant to the *language*.

Third, the two terms "word" and "complete thought" are not defined. It is in fact difficult to define them. Yet, everyone kind of knows what they are. The two terms may lack a definition. Nevertheless, both are indispensable. They are part of the definitions of other terms. Everyone knows what a word typically is and everyone can readily produce an example on which all would agree that it is indeed a word. But it is difficult to make a decision about every single element in language whether it is a word or not. Likewise, everyone knows strings of words that are complete thoughts and can easily furnish an example. Complete thoughts typically begin with a capital and end in a period. The pages of a newspaper contain an abundance of examples of complete thoughts. But again, it is not possible to decide about every single string of words whether it is a complete thought or not. In sum, the terms "word" and "complete thought" are used here as a biologist uses "life" and a physicist "force." Everyone knows what "life" is and what "force" is. But delineating the phenomena precisely is another matter.

Fourth, three other crucial terms will not be much more clearly defined than "word" and "complete thought." They are "entity," "property," and "circumstance." Consider the substantive "car," the adjective "blue," and the adverb "there." All the substantives undeniably have something in common with one another. They all refer to some general type of concept. The same may be said about all the adjectives and all the adverbs. This undeniable fact is the material basis for accepting the existence of three general types of concepts. But defining these three concepts is another matter. The type of concept to which all the substantives refer is called here "entity," that to which all the adjectives refer is called "property," and that to which all the adverbs refer is called "circumstance." Perhaps better terms could be found, but what's in a name? Entities such as "car" have a certain "thing-ness" to them. This "thing-ness" is difficult to put into words. For this reason, the term remains vaguely defined here. But the presence of this "thing-ness" is clearly felt. By contrast, properties such as "blue" clearly do not exhibit this "thing-ness." Properties are typically attached to entities. Thus, one can speak of "blue car." Circumstances differ as follows from entities and properties. As distinct from entities, circumstances do not exhibit "thing"-ness. As distinct from properties, circumstances do not typically remain attached to entities. Consider the circumstance "there" in the statement "the blue car is there." The car can very easily change its circumstance "there" when someone drives off in it. By contrast, there is no denying that a blue car typically remains blue. In

other words, entities can be associated with both properties and circumstances. But they change their circumstances more easily than their properties.

#### TERMS AND DEFINITIONS

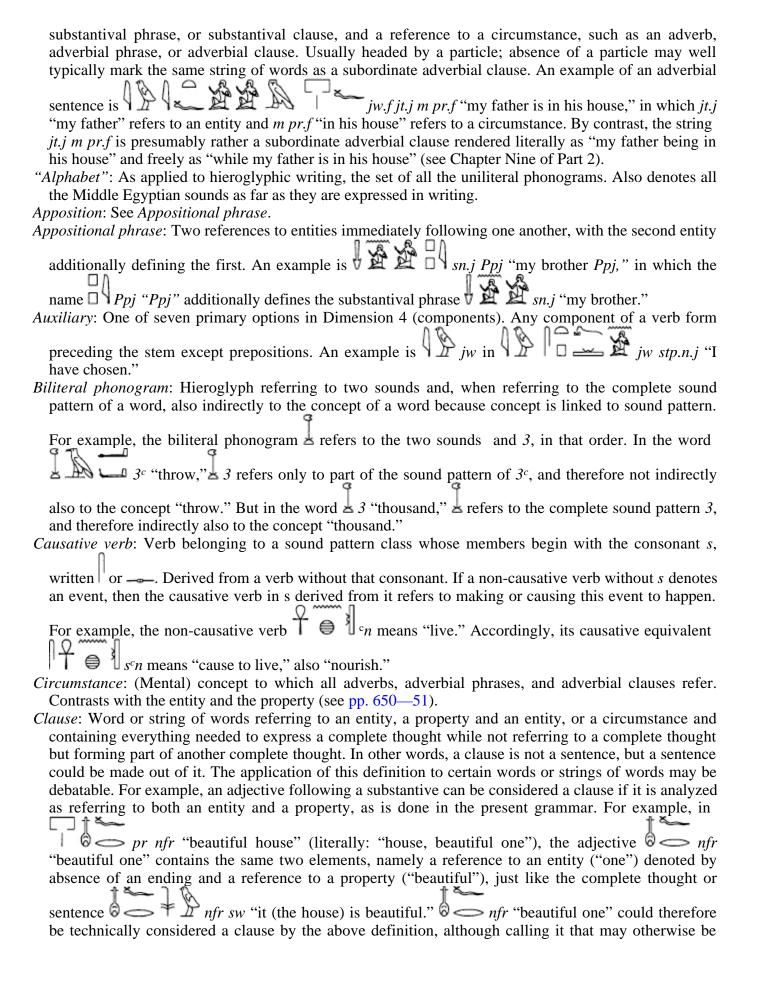
[Terms are alphabetized first fully by the first word alone, only then by the second word.]

Absence of inflection: Specific option exhibited by verb forms in Dimension 3 (inflection). Contrasts with such options as "single inflection" and "double inflection." An example of a verb form exhibiting absence of inflection is the infinitive \( \sigma \) jrt "to do." Absolute existence: Existence without relation to circumstances of time or space, as in "the world exists." It is not clear how this would be expressed in Middle Egyptian. Contrasts with relative existence, as in "there is a world." Active: Specific option exhibited by verb forms in Dimension 6 (voice). Contrasts with the option "passive." Defined indirectly in this grammar by simply referring to the contrast between active and passive in English and other modern languages. Otherwise left undefined. An example of an active verb form is "I ate," as contrasted with passive "the bread was eaten." Adjectival clause: Clause that functions like an adjective in that it appears in places in which one otherwise also typically finds adjectives. Refers to an entity and a property as adjectives do. Adjectival clauses are studied in Chapter Eight of Part 2. An example is *jrt.n.f* "that which he has done." Adjectival phrase: Phrase functioning like an adjective by appearing where one otherwise also typically finds adjectives. An example is  $6 \longrightarrow 1$  nfr r "whose face is beautiful." Also: String of words consisting of an adjective and the word subordinated to it. Adjectival sentence: Type of sentence whose concept it is to associate a property and an entity with one another and whose pattern consists of two members, an adjective as a reference to a property followed by a reference to an entity such as a substantive or a substantival phrase. An example is sy "she is beautiful," in which the adjective  $\bigcirc$  — nfr refers to a property and the dependent personal Adjective: Type of word typically referring to two types of concept at the same time, both a property and an entity. An example is an entity. An example is an entity of the first form of the *nfr* and "one" translates the feminine entity denoted by the ending  $\triangle t$ . As core member of an adjectival sentence, the adjective refers apparently to just a property. An example is sentence, the adjective refers apparently to just a property. "she is good," in which "good" translates the property denoted by nfr and "she" translates the entity denoted by sy. Observe the lack of the ending t in the adjective. Adverb: Type of word referring to a type of concept called here a circumstance. An example is "there" Adverbial clause: Clause that functions like an adverb in that it appears in places in which one otherwise

Chapter Nine of Part 2. A provisional example is *jwt.f* "so that he might come." *Adverbial phrase:* Phrase that functions like an adverb in that it appears in places in which one otherwise also typically finds adverbs. An example is

also typically finds adverbs, referring to a circumstance as adverbs do. Adverbial clauses are studied in

Adverbial sentence: Type of sentence whose concept it is to associate a circumstance and an entity with one another and whose pattern consists of two members, a reference to an entity, such as a substantive,



adverbial clauses depending on whether the clause refers to an entity, an entity and a property, or a circumstance. Complementary distribution: The undeniable fact that certain words or strings of words referring to the same type of concept may alternate with one another in a given position in the sentence, depending on jw.f m jwt means "he is coming" (literally: "he is in  $\square \implies jw.f \, r \, stp$  means "he is choosing" (literally: "he is on choosing"). It can be said that the tion refers to words or strings of words complementing one another in filling a certain position. Their uses in that position are distributed over certain conditions. Furthermore, they alternate with one another or *complement* one another in order to refer to the same concept, namely the present tense. And their appearances in that position are distributed over certain conditions: 1 rprecedes the infinitive  $\square$  stp because  $\square$  stp "choose" is transitive and  $\square$  m precedes jwt because  $\int y dy$  jw(y) "come" is intransitive.  $\int r$  and complementary distribution. Complete thought: Concept whose sound pattern one typically finds written out in English as a string of words beginning with a capital letter and ending in a period. Any equivalent concept in Middle Egyptian. Otherwise left undefined (see p. 650). Component: Any option exhibited by verb forms in Dimension 4 (components). Also, any element of sound pattern in a verb form attached to its own concept, except stem and inflection. For example, in  $wn.jn.f \ r \ jrt$  "then he did," f is inflection and jr(y) is the wn.jn, the preposition r, the fact that jr does not geminate, and the singular substantival ending  $\triangle t$  are components; furthermore, the infix Components: One of the eight dimensions of the verbal system, Dimension 4. Describes everything in the sound pattern except inflection and stem. The concepts attached to components as sound patterns are described in Dimensions 5 to 8. Compound preposition: Preposition consisting of more than one part, one part being itself a preposition, another part often being a substantive denoting a body part. Examples are M  $m^c$  "through, because of (literally: "in hand of") and 3t "in front of (literally: "in front part of"). Compound verb form: Verb form containing an auxiliary, the rest of the verb form being the main △ wn.jn.f r jrt "then he did," wn.in. f is the constituent. For example, in the verb form auxiliary and *r irt* is the main constituent. Concept (or mental concept or meaning): Elements inside (!) the brain or mind that make language what it is when they are linked inside the mind to sound patterns that can be externalized by means of arbitrary spoken or written signals. Linking concepts to sound patterns allows them to be transmitted by means of externalized signals from speaker to hearer, from writer to reader. It is assumed, of course, that the hearer's or reader's mind possesses the same links in order to attach an incoming sound pattern to the same concept as the speaker or writer. Concepts reflect what the mind observes and thinks. But the mind's registering of an observation, say of a dog, is itself not language. It is only when the mind firmly links the concept of a dog to an arbitrary sound pattern such as dog in English or chien in French or

*Hund* in German that the mind begins acquiring language. The sound pattern is a kind of chemical command code that can trigger the pronunciation of these words whenever needed. Neither concept nor

considered an unusual use of terminology. The three sub-types are substantival, adjectival, and

sound pattern are language. It is the link between them that is. This link is presumably of some chemical nature. (On this in detail, see Appendix VI below.)

Concept class (1): Group of concepts sharing certain features, for example, all the concepts referring to male human beings ("man," "brother," scribe," and so on). May be denoted by a hieroglyphic sign of its own, called a determinative. For example, in some some some some sign of the concept, but rather to a class of concepts, namely the class of male human beings. Determinatives refer neither to sound pattern (as phonograms do) nor to concept (as ideograms do), but to a certain way in which concepts are organized, namely in sets or groups or classes.

Concept class (2): One of the eight dimensions of verb forms, Dimension 2. Describes to which concept class the event expressed by the verb belongs, regardless of specific verb form. The main types of concept classes are transitive and intransitive.

Conjugate: Produce all possible variations according to inflection in a specific verb form that exhibits

conjugation. Thus, to conjugate the verb form jw stp.n.j "I have chosen" means to produce jw stp.n.j "I have chosen," jw stp.n.k "you (masc.)

have chosen,"  $\square$   $\square$   $\Longrightarrow$  jw stp.n. "you (fem.) have chosen," and so on.

*Conjugation*: Type of inflection exhibiting person in addition to gender and number or just number. Contrasts with declension, which exhibits only gender and number. The three sub-types of conjugation are suffix conjugation, stative conjugation, and conjugation by dependent pronouns.

Conjugation by dependent pronouns: See Dependent personal pronouns, conjugation by.

*Consonant*: Sound characterized by a degree of friction or obstruction of the air flow along the vocal tract. Contrasts with the absence of this friction or obstruction exhibited by the sounds called vowels. As far as we know, each consonant is represented by a hieroglyphic sign of its own. As far as hieroglyphic

writing allows us to see, there are 23 consonants in Middle Egyptian if one counts i, j, j, j, j, and i, y, j whose pronunciation and relation to one another are uncertain, as a single consonant, and if one also

Coordinate: Any option exhibited by a verb form in any of the eight dimensions of the verbal system. Fully identifying a verb form involves choosing all the relevant options in all the relevant dimensions. An example is the option "active" in Dimension 6 (voice).

Core: A feature of sentences. What is left of any sentence belonging to any sentence type after removing as much as possible while not turning the sentence from a complete thought into an incomplete thought. Consists of one or more of what are called here members, which are references to entities, to properties, or to circumstances. Each sentence is assigned to a sentence type according to what the members of its core are and how they are arranged.

Countable: Substantive whose concept typically can be counted. Contrasts with the non-countable. An example of a countable is sn "brother." An example of a non-countable is sn "brother."

Declension: Type of inflection exhibiting gender and number only, not person. Contrasts with conjugation, the other type of inflection, which does exhibit person in addition to gender and number or just to number. The two sub-types of declension are declension by adjectival endings and declension by third person suffix pronouns.

Declension by adjectival endings (also adjectival declension): Declension denoted by the same gender and

number endings as the adjective's. An example is  $\triangle t$  in  $\bigcirc$   $\triangle$  jrrt "she who does."

"wine".

Declension by third person suffix pronouns: Declension denoted by third person suffix pronouns. Denoting gender and number in the singular masculine and singular feminine and just number in the plural. The feature "third person" is present but inert because there is no contrast with a first person and

declension. For example, to decline the verb form if the who does means to produce also the following forms:  $\bigcirc$   $\bigcirc$  jrrt "she who does,"  $\bigcirc$  jrrw "they (masc.) who do," and  $\bigcirc$   $\bigcirc$ jrrwt "they (fem.) who do." Declining can also be said about adjectives, which exhibit the same endings as one of the two types of declension. Definite: Referring to one specific entity among all items of the same entity. Contrasts with indefinite. An example of an entity is "house." An example of a definite entity is "the house." "The house" typically implies that we know which specific house is meant. Demonstrative pronoun (also just demonstrative): Type of word referring, like the adjective, to both an entity and a property: first, to a definite entity, and second, to the property of being located near or far from the speaker or writer. Near demonstratives refer to what is perceived to be close to the speaker. Far demonstratives refer to what is perceived to be not close to the speaker. Like the adjective, the demonstrative can be used dependently and independently. Demonstratives are used independently in pn "this one" and pf "that one" and dependently in pr pn "this house" and pr pf "that house." Dependent personal pronoun: One of the three types of personal pronoun. Differs from the other two types, independent and dependent personal pronouns, with regard to sound pattern and with regard to the positions in which it appears, but not with regard to concept. Dependent personal pronouns, conjugation by: One of the three types of conjugation. Determinative: Hieroglyph referring neither to a word's mental concept (as ideograms do) nor to its sound pattern (as phonograms do), but rather to the general class of concepts to which the concept denoted by a word belongs. Almost always written at the very ends of words. An example is  $\mathbb{Z}$  in  $\mathbb{V}$  in  $\mathbb{Z}$  sn "brother." does not refer to the concept "brother," but to the class to which the concept "brother" belongs, namely male human beings. Dimension: One of eight sets of options, in most or all of which verb forms exhibit one or more options. Fully identifying a verb form means choosing all the relevant options in all the relevant dimensions. According to the organization proposed in the present grammar, there are eight dimensions or sets of options. Other organizations are conceivable. One requirement is that they encompass all the relevant facts. They are: sound pattern class, concept class, inflection, components, negation, voice, time, and function. Direct genitive: Genitive phrase of which the two entities are not connected by the relational adjective n(y) "of." An example is  $\square$  | nbt pr "mistress of the house." Direct inflection: Any inflection attached to the stem. Appears in the main constituent of compound verb forms. Contrasts with indirect inflection, which is attached to an auxiliary. An example is the second jw.fstp.f "he chooses," as opposed to the first f, which is indirect inflection. Verb forms without auxiliaries exhibit direct inflection only. Direct inflection only: Type of inflection exhibited by those verb forms that do not have an auxiliary. Contrasts only with indirect and direct inflection combined, found in verb forms that do exhibit an auxiliary. According to the organization followed here, indirect and direct inflection combined includes instances in which the auxiliary exhibits inflection and the main constituent does not, as in jw.f r stp; r stp is considered to exhibit absence of inflection, as a type of direct inflection. It therefore seemed convenient to organize inflection in this way. Alternative organizations are thinkable. Direct object: Usually understood as the entity that undergoes the event. For example, it may be said that,

in "I ate the bread," "I" performs the event of eating and "the bread" undergoes it. The notion

Decline: Produce all possible variations according to inflection in a specific verb form that exhibits

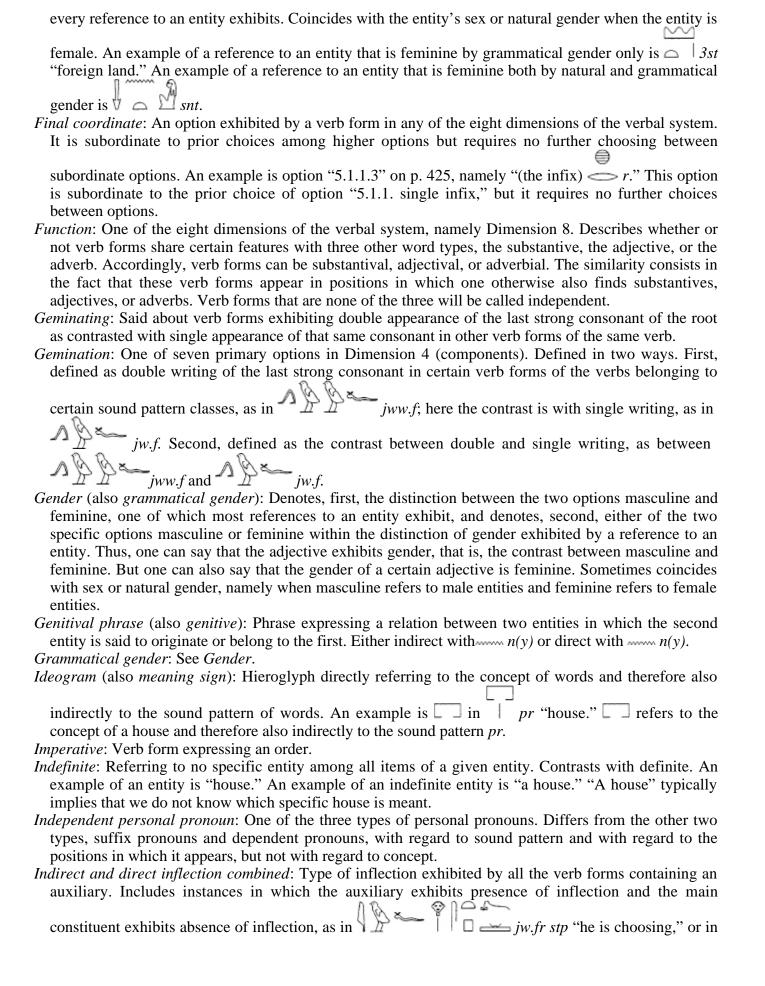
a second person. An example is *jr. ty.s* "she who will do."

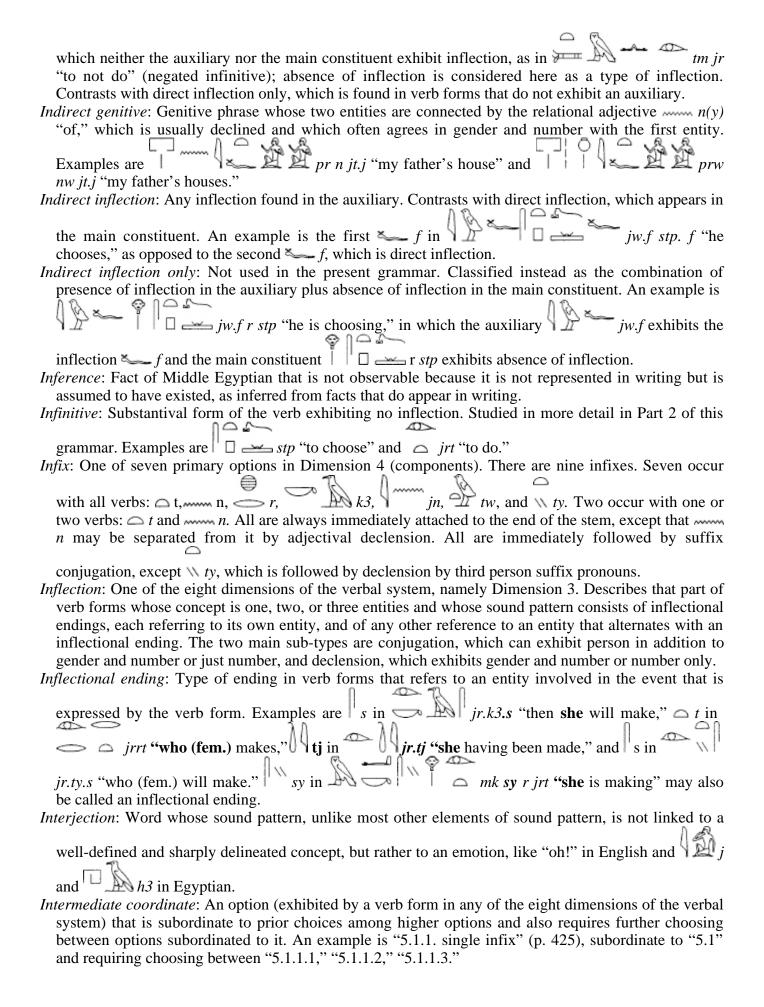
"undergo" remains somewhat vaguely defined. It is mainly for this reason that, alongside the traditional term "direct object," the term "second satellite" is proposed in this grammar and will be used in Part 2. It is defined in an empirically verifiable way. Replacing a popular term such as "direct object" in common usage is not an achievable aim. Yet, within the confines of this grammar, it was felt necessary to back up the term "direct object" with a subsidiary one that is fully accessible to observation. Double consonant: Two identical consonants immediately following one another. Examples are pp and tt. Not visible in writing, but widely assumed to have existed in Middle Egyptian and to have been written as a single consonant. Along the same lines, it is assumed that two identical consonants written out, like rr in rr.f, are not a double consonant, but two identical consonants separated by a vowel. Double inflection: Specific option exhibited by verb forms in Dimension 3 (inflection). Type of inflection referring to two entities. Contrasts with single inflection, which refers to one entity, and absence of inflection, which refers to none. Dual: Ending of a substantive indicating that two items of the entity denoted by the substantive are referred to. An example is snty "two sisters." One of three options within number, the other two being singular and plural. Enclitic particle: One of two main types of enclitic words, the other type being the enclitic pronoun. Examples are rf and grt. Enclitic pronoun: One of two main types of enclitic words, the other type being the enclitic particle. The two sub-types of enclitic pronouns are the dependent personal pronouns ( $\sum_{i=1}^{n} w_i$ ,  $w_i$ , and so on) and the preposition n plus suffix personal pronouns (n n, n n, and so on). As contrasted with enclitic particles, enclitic pronouns cannot precede the stem of the verb forms that they accompany. Enclitic word: Word whose position in the sentence varies in that it occupies the first available space between words, although other restrictions may apply. Some words can be separated from one another by enclitic words whereas others cannot. The reasons are not always fully understood. But wherever words can be separated, one can think of a space. The location of the spaces is regular. For example, jw.f stp.f "he chooses," as by the particle grt in □ _____ jw.f grt stp.f. The two main types are enclitic particles and enclitic pronouns. Enclitic pronouns that are not inflection cannot precede the stem of the verb form that they accompany. Entity: (Mental) concept to which all substantives, substantival phrases, and substantival clauses refer. Contrasts with the property and the circumstance (see pp. 650-51). Existential Sentence: Type of sentence whose concept it is to denote the relative existence or relative non-existence of entities and whose sound pattern includes such members as *jw wn* "there is" and _____ nn wn "there is not." Fact: Anything directly accessible to the senses, in the present work almost exclusively the faculty of

Feminine (abbreviation: fem.): One of two options within grammatical gender, either of which almost

speaker or writer. An example is pf "that (one)."

Far demonstrative: Demonstrative pronoun whose concept includes the absence of closeness to the





Intransitive verb: Any verb of which verb forms such as and many others cannot be immediately followed by dependent personal pronouns. For example, ^^ >> jw(y) "come" is intransitive. One cannot say him"). Often defined as any verb that cannot have a direct object. "Inverted" use of prepositional adjectives: Rare use of the prepositional adjective in which the entity to which the prepositional adjective refers is the object of the preposition, and not the reference to the X normally means "that which is in X." In the "inverted" use, it means "that which X is in." *Isolating contrast*: Concept attached to certain sound patterns presenting something in contrast with and at the exclusion of something else. Can be marked in writing by italics in English. For example, in "she arrived yesterday," the italics in "yesterday" may imply "not today," that is, "yesterday" in contrast with and at the exclusion of "today." May also be marked by the expression "it is ... that ..." in English, as in "it is yesterday that she arrived." Linguistic sign: Any link between a sound pattern and a concept. The basic unit of language. Link between a sound pattern and a concept: The basic unit of language. Also called "linguistic sign" or just "sign." Logogram (also word sign): Hieroglyphic sign referring to both concept and sound pattern of a word and therefore to both sides of a word or to the word as a whole. For example, the ideogram in pr "house" refers to the concept of a house and therefore also indirectly to the sound pattern pr. Because it refers to both sides of a word, the ideogram \( \) may at the same time also be considered a logogram. In fact, every ideogram can also be considered a logogram. By contrast, only certain phonograms can be considered logograms, namely those that refer to a complete sound pattern and therefore indirectly also to a concept. For example, the uniliteral phonogram M m refers to a complete sound pattern in the word M "in" and is therefore also a logogram in this word. But in the word M sm "hear." M m refers only to part of a sound pattern and is therefore not a logogram. *Main constituent*: Everything in a compound verb form except the auxiliary. Masculine (abbreviation: masc.): One of two options within grammatical gender, either of which almost every reference to an entity exhibits. Coincides with the entity's sex or natural gender when the entity is male. An example of a reference to an entity that is masculine by grammatical gender only is | pr "house." An example of a reference to an entity that is masculine both by natural and grammatical gender is  $\forall \, \boxtimes \, sn \, \text{"brother."}$ Meaning: See Concept. Meaning sign: See Ideogram. *Member*: Principal part of the pattern of a sentence type. Mostly a reference to an entity, a property, or a circumstance. *Mental concept*: See *Concept*. Natural gender (also sex): Feature of certain entities, that of being either male or female. Denoted by the grammatical genders masculine and feminine respectively. Near demonstratives: Demonstrative pronoun whose concept includes closeness to the speaker or writer.

Negation: One of the eight dimensions of the verbal system, namely Dimension 5. Describes whether an event denoted by a verb form does or does not occur. The two options are "affirmative" and "negated." Neuter: Term traditionally used for what is in fact general "it," that is, "it" when it does not refer to a

An example is pn "this."

specific entity, as in "I did it." Denoted by the third person dependent pronoun also by the grammatical gender of the feminine in the singular. The term is widely used but may wrongly imply that Middle Egyptian exhibits a third grammatical gender in addition to masculine and feminine, as is the case in many languages. Nisba adjectives: See Relational adjectives. Nominal: Term covering both "substantival" and "adjectival." Substantives and adjectives both refer to an entity, the adjective also to a property. Non-countable: Substantive whose concept typically cannot be counted. Contrasts with the countable. An example of a non-countable is *mw* "water." An example of a countable is *pr* "house." *Non-enclitic*: Not subject to the rules determining the position of enclitic words in the sentence. Non-enclitic particle: Particle appearing at the very beginning of sentences and therefore not subject to the rules determining the position of enclitic words in the sentence. Non-geminating: Said about verb forms exhibiting single appearance of the last strong consonant of the root as contrasted with double appearance of that same consonant in other verb forms of the same verb. m3.f, which contrasts with non-geminating An example of a non-geminating verb form is Non-verbal auxiliary: Auxiliary of which it cannot be established with certainty that it derives from a verb even if it quite and possibly did. There are three:  $\bigvee jw$ ,  $\longrightarrow r$ , and Non-verbal sentence: Sentence belonging to a sentence type whose core members do not necessarily contain a verb. The four non-verbal sentence types are the substantival sentence, the adjectival sentence, the adverbial sentence, and the existential sentence. Noun: Synonym of "substantive." Nowadays more widely used in English than "substantive," which is nevertheless preferred in this grammar. The main reason is that the adjective corresponding to "noun," namely "nominal," can then be used to encompass both "substantival" and "adjectival." *Number*: Denotes both a distinction between options and a specific option within that distinction. The distinction is that between the three options singular, plural, and dual, one of which each reference to an entity exhibits. Any of the three specific options singular, dual, and plural exhibited by a reference to an entity can also be called the number of that entity. Parallel conjugation: Type of conjugation in which two inflectional endings of conjugation refer to the same entity in a single verb form. For example, in the verb form chooses," the inflectional ending of conjugation  $\longrightarrow f$  twice refers to the same entity "he." Parallel inflection: Type of inflection in which two inflectional endings in a single verb form refer to the same entity. There are two sub-types. Conjugation can be parallel to conjugation. This is parallel conjugation. An example is | | jw.sn stp.sn "they choose." Or declension can I | | wnw stp.sn "they who used to be parallel to conjugation. An example is _____ choose." Parallel inflection is not to be confused with double inflection, which also exhibits two inflectional endings. But each inflectional ending of double inflection refers to an entity of its own.

Particle: Type of word that adds a nuance to a thought that is already complete. The nuances denoted by particles are often difficult to define precisely. Many particles therefore cannot be translated exactly.

Examples are non-enclitic  $\longrightarrow mk$  and and enclitic  $\longleftarrow rf$ .

Passive: Specific option exhibited by verb forms according to Dimension 6 (voice). Contrasts with the option "active" only. Defined indirectly in this grammar, simply by referring to the contrast between active and passive in English and other modern languages. Otherwise left undefined. An example of a passive verb form is "the bread was eaten" as contrasted with "I ate the bread."

Pattern: Specific sound pattern or sound patterns shared by the cores of all the sentences belonging to a

given sentence type. Likewise, the cores of all the sentences belonging to a sentence type share one concept. Each sentence type has its own pattern or patterns, the substantival sentence has three main patterns. For example, all the adjectival sentences share the sound pattern consisting of an unchangeable adjective followed by a reference to an entity, as in  $\lozenge \longrightarrow \not \cong \nearrow nfr sw$ . The concept of the adjectival sentence type is to associate a property with an entity. Pattern 1, 2, and 3: The three main types of general sound pattern exhibited by the substantival sentence type. Pause: Feature whose absence may mark a string of words as a clause. This is an inferred fact. It is not directly observable. An example from English is the absence of a pause in "I see he is sick," which makes "he is sick" into a clause, as contrasted with the presence of a pause in "I see. He is sick." Permanent association of entities: Association between two entities that is typically never disconnected. Typically expressed by the substantival sentence, as in significantle significant sentence, as in <math>significant sentence in significant sentence in significant sentence in significant sentence in significant so signisomebody's son, typically always some body's son. Contrasts with the transient association between entities, typically expressed by the adverbial sentence, as in "he is a king." One is typically not always a king. *Person*: The distinction between the first person or the speaker (the "I" person), the second person or the person addressed (the "you" person), and the third person or any other reference to an entity as a residual category ("he," "they," the king," and so on). Personal pronoun: Word type whose complete concept consists of person, gender, and number (for example, third person masculine singular in the independent personal pronoun — ntf) or just of person and number (first person singular in the independent pronoun *ink*). The three sub-types, which differ with regard to sound pattern but not with regard to concept, are the suffix personal pronouns ( $\sum_{i=1}^{n} j_{i}$ ,  $\sum_{i=1}^{n} k_{i}$ , and so on), the dependent personal pronouns ( $\sum_{i=1}^{n} k_{i}$ ) on), and the independent personal pronouns ( *ink*, *ntk*, and so on). Phonetic complement: Phonogram used to additionally specify sounds already denoted by other phonograms. For example, uniliteral phonograms can specify one of the two sounds of a biliteral phonogram, like r in w, or two of the three sounds of a triliteral phonogram, like n and *Phonogram*: Hieroglyph referring to the sound pattern of words, and when referring to the complete sound pattern of a word, also to the concept of that word. *Phrase*: String of two or more words referring to an entity, a property, or a circumstance, and denoting an incomplete thought without containing the elements needed to denote a complete thought, as opposed to a clause, an incomplete thought that does contain the elements to express a complete thought. *Plural*: Ending of a substantive indicating that more than two items of the entity denoted by the snwt "sisters." One of three options within substantive are referred to. An example is number, the other two being singular and dual. *Possessive*: Pertaining to a relation between a possessor and a possession. *Preposition (1):* Word type that together with references to entities makes up prepositional phrases, which are adverbial and refer to circumstances. An example of a preposition is r. An example of a prepositional phrase is r.f "toward him." Preposition (2): One of seven primary options in Dimension 4 (components). Encompasses the three options r, m, and r. Always immediately precedes the stem, which assumes the form of

the infinitive.

Prepositional adjective: Adjective ending in -y derived from a preposition. An example is the

prepositional adjective ry "which is on," which is derived from the preposition r "on."

Prepositional phrase: Phrase consisting of a preposition followed by a reference to an entity. An example

is m pr.f "in his house."

*Primary coordinate*: An option exhibited by a verb form in any of the eight dimensions of the verbal system. It is not subordinate to prior choices among higher options but requires further choosing between options subordinated to it. An example is option "5. infixes" on p. 425. It is not subordinate to prior choices but requires further choosing between options "5. 1" and "5.2."

*Principle of parallelism*: Principle of inference by which a distinction between verb forms observed in one or more verbs can be generalized to all verbs. For example, because the verb jr(y) "do" exhibits the difference between jr "who has done" and jrr "who does," it is generally assumed that d exhibits a distinction between d "who has said" and d "who says," with some unwritten feature corresponding to the difference between absence of gemination and presence of gemination in jr(y) "do."

*Process*: Concept expressed by every verb form, namely presence of change. Contrasts with state, which is absence of change.

*Pronoun*: Term encompassing different word types referring to entities or entities and properties. Sub-types are demonstrative pronouns and personal pronouns.

*Property*: (Mental) concept to which all adjectives, adjectival phrases, and adjectival clauses refer. Contrasts with the entity and the circumstance (see pp. 650-51).

Rebus principle: Principle of hieroglyphic writing according to which a hieroglyph referring to the concept of a word and therefore also indirectly to its sound pattern can also refer to just the sound pattern. For example, the ideogram is used to refer to the concept "mouth," which is attached to the sound pattern r. But can also refer just to the sound pattern r, regardless of concept.

*Relation*: Fact pertaining to the observable organization of elements rather than to the observable elements themselves. Thus, one may observe a chair and a table. But one may also observe the spatial relation between a chair and a table standing in a room. This fact of organization is undeniable. Similar facts of organization can be observed in language. The two main sub-types are relations of juxtaposition and relations of substitution.

*Relation of juxtaposition*: Fact pertaining to the observable organization of elements rather than to the observable elements themselves, as observed at one moment in time. For example, if the observable elements are a chair and a table, one may observe the chair and the table simultaneously in their spatial relation to one another.

*Relation of substitution*: Fact pertaining to the observable organization of elements rather than to the observable elements themselves, as observed at successive moments in time. For example, if the observable elements are a chair and a table, one may observe the fact that, where earlier a chair stood, a table has taken its place.

Relational adjective: Adjective derived from substantives and prepositions by means of the ending -y and denoting that which pertains to the concepts expressed by those substantives and prepositions.

Examples are tpy "principal, first" (pertaining to "head"), derived from the substantive tpy

"head," and ry "who / which is on" (pertaining to "on"), derived from the preposition r "on."

Relative existence ("there is"): Existence relative to some circumstance, as in "there is a world," in which "there" vaguely refers to some unspecified circumstance, and as in "there is beer here," in which "here" refers to a specific circumstance. Denoted as a concept by existential sentences. Contrasts with absolute existence, as in "the world exists."

Rhetorical question: Question for corroboration ("yes-or-no" question) to which no answer is expected, used to emphasize a statement by questioning its negation. An example is "is it not beautiful?", which as a rhetorical question emphasizes the statement "it is beautiful."

Root: That which is common to all the verb forms of a verb. Basically a set of consonants. Variations in

the root are here called stems. For example, the three consonants s, t, and p form the root of the verb □ *stp* "choose." These three consonants occur in every verb form of that verb. The vowels cannot be observed but presumably changed from one verb form to another. *Root concept*: The concept of that which is common to all the verb forms of a verb form. Root sound pattern: The sound pattern of that which is common to all the verb forms of a verb. Sentence: Word or string of words expressing a complete thought. Sentence pattern: See Pattern. Sentence type: A set of sentences whose cores share a general concept and a general sound pattern. For example, the adverbial sentence type consists of all the sentences whose core exhibits, as a concept, the association of an entity and a circumstance and whose sound pattern consists of a reference to an entity followed by a reference to a circumstance. Sign (also linguistic sign): Link between a sound pattern and a concept. The basic unit of language. Single inflection: Specific option exhibited by verb forms in Dimension 3 (inflection). Inflection referring to one entity. Contrasts with double inflection, which refers to two entities, and absence of inflection,

which refers to none.

Singular: Ending of a substantive indicating that just one item of the entity denoted by the substantive is

referred to. An example is snt "sister." One of three options within number, the other two being dual and plural.

Singular substantival ending: One of seven primary options in Dimension 4 (components). There are two singular substantival endings, masculine singular, denoted by absence of an ending, and feminine singular, denoted by the ending  $\triangle t$ .

Sound: Basic unit of all the sound patterns. 23 consonants are visible in hieroglyphic writing if one counts

 $ightharpoonup_{j,} ightharpoonup_{j,} ightharpoon$ h, s, š, q, k, g, t, d, and In addition, a number of vowels presumably existed; but these sounds are not written and can therefore not be observed.

Sound pattern: Elements inside (!) the mind that make language what it is when they are linked inside the mind to elements of concept. Can be externalized as spoken or written signals. A sound pattern is a kind of command code resting in the brain and making it possible to pronounce certain sounds whenever required. (On this in detail, see Appendix VI.)

Sound pattern class: One of the eight dimensions of the verbal system, Dimension 1. Indicates to which of several classes, each with its own characteristics, the sound pattern of the root belongs. An example is

the class of third-weak verbs. One member of this class is mr(y) "love"

Sound sign: See Phonogram.

State: Absence of change. Contrasts with process.

Stative: Form of the verb referring to a state, that is, absence of change, but also implying the prior process, or presence of change, leading to the state.

Stative conjugation: One of the three types of conjugation.

Stem: Variation in the root of a verb. For example, the verb wnn "be" exhibits the two stems

wnn and wn. One of the variations serves as the dictionary form of the verb.

Subordinate: Word or string of words that does itself not refer to a complete thought, but forms part of a complete thought.

Substantival clause: Clause that functions like a substantive in that it appears in places in which one otherwise also typically finds substantives, referring to an entity as substantives do. Substantival clauses

come."

Substantival phrase: Phrase that functions like a substantive in that it appears in places in which one otherwise also finds substantives. An example is the appositional phrase, which is substantival. Also: a

substantive and any words subordinated to it.

Substantival sentence: Type of sentence whose concept it is to associate one entity with another entity. Its

three main patterns consist of references to entities and partial pw arranged in certain ways.

Substantive: Type of word referring to an entity as a concept.

Suffix conjugation: One of the three types of conjugation.

*Suffix personal pronoun*: One of the three types of personal pronouns. Differs from the other two types with regard to sound pattern and where it appears, but not with regard to concept.

*Time*: One of the eight dimensions of the verbal system, Dimension 7. About how events denoted by verb forms relate to time.

Transient association of entities: Association between two entities that can be discontinued. Typically

expressed by the adverbial sentence, as in  $\iiint_{i} f(x) = f(x) \int_{i}^{\infty} f(x) f(x) dx$  with the transient association between entities, typically

expressed by the substantival sentence sample sam

Transitive verb: Any verb of which verb forms such as jw.f stp.f "he chooses" can be followed by dependent personal pronouns. Thus, jr(y) "do, make" is transitive because one

*Triliteral phonogram*: Hieroglyph referring to three sounds. Because words rarely have more than three consonants, triliteral phonograms tend to denote a complete sound pattern and therefore also indirectly

a concept. An example is  $c \times 3$  in  $c \times 3$  "many." refers directly to the three sounds  $c \times 3$  and  $c \times 3$  and

indirectly also to the concept "many." By contrast, the ear  $\mathcal{Q}$  in  $\mathcal{Q}$  in "hear" is better interpreted as an ideogram. It refers directly to the concept "hear" and indirectly also to the three sounds s, , and m.

*Uniliteral phonogram*: Hieroglyph referring to one sound and, when referring to the complete sound pattern of a word, also indirectly to the concept of a word because concept is linked to sound pattern.

For example, the uniliteral phonogram refers to the sound m. In the word m refers only to part of the sound pattern sm and therefore not indirectly also to the concept "in." But in

the word m "in," m refers to the complete sound pattern m, and therefore indirectly also to the concept "in."

*Unobservable component*: Element in verb forms other than the stem and inflection and attached to a tidbit of concept of its own, for example, vowels.

*Verb*: Type of word denoting change.

*Verb form*: Word or string of words featuring a verb and denoting one instance of change. Exhibits one or more options in up to eight dimensions as sets of options.

Verbal auxiliary: Auxiliary of which it can be established with certainty that it derives from a verb.

Verbal coordinate: Any option exhibited by a verb form in any of the eight dimensions of the verbal system.

Voice: One of the eight dimensions of the verbal system, namely Dimension 6. Encompasses the two options "active" and "passive."

*Vowel*: One of the sounds characterized by a certain lack of friction or obstruction of the air flow along the vocal tract, as opposed to consonants. Not expressed in hieroglyphic writing.

"Weak" consonants: The consonants w and y, called "weak" because they are only rarely written in words that are assumed to exhibit them, as if they are too weak to appear.

Word: Concept defined here only by what everyone typically thinks it is (see p. 650).

Word sign: See Logogram.

## APPENDIX VI CONTIGUITY AS A KEY CONCEPT

In Works Listed above in the Preface, at page lxviii, I have proposed the existence in Egyptian of a phenomenon that may be called contiguity. Contiguity is two things. First, it is a feature of reality as the Egyptians perceived it. Second, it is a feature of the Egyptian language. The feature of the language allowed Egyptians to speak about the feature of reality. Contiguity becomes really relevant only in Part 2 of this grammar. But it is so fundamental to the organization of this grammar that I felt a need to provide, already now, a full explanation of how I understand contiguity and of why it received this name. Where exactly does contiguity fit in the whole of language?

When it comes to features of language, contiguity is much less concrete than, say, "house" as the meaning of *pr*. The abstract nature of contiguity makes it all the more necessary to provide a sharp definition. Linguistics is sometimes suspected of using the language of science, but not always its rigor. What follows is an attempt to define contiguity as concretely as possible, assuming no prior knowledge of grammar or of any theory of language on the part of the reader. Accepting contiguity implies accepting other features whose existence some consider doubtful. Much else is therefore at stake when it comes to contiguity. The present description is general. It focuses on the theory rather than on the evidence. Details about the evidence are found in the publications listed on page lxviii.

#### Facts Strictly Speaking or Facts as Phenomena

If contiguity is a fact of language, then it may be useful to begin from the very beginning by asking what a fact is. In a way, we all know what a fact is. But defining it is another matter. Defining a term means to describe what out there in reality it serves as a label for. For the purpose of good scientific house-keeping, explicitly defining one's most basic terms is not a superfluous undertaking. Starting from those basic definitions as assumptions, an argument should proceed step by step and every step should be made fully explicit.

What is a fact? Strictly speaking, a fact is something that presents itself to the bodily senses. There are five bodily senses: sight, hearing, touch, taste, and smell. For something to be a fact, several people ought to be able to agree freely that that something has presented itself to one or more of their five senses. The five senses are the sole means by which the mind becomes aware of what is outside itself. Supernatural senses play no role in scientific discourse.

A fact strictly speaking can also be called a phenomenon. "Phenomenon" is derived from Greek for "appear." Phenomena are things that appear. What they appear to is the senses. Phenomena are either seen, or heard, or touched, or tasted, or smelled.

#### Facts That Are Not Hard Facts

Facts have everything to do with the bodily senses. Any contact with one or more of the five senses registered by the mind makes a fact. But no mind operates exclusively with facts that its own senses have perceived. The mind also accepts other kinds of facts. The senses retain their crucial role in the perception of these other facts. But it is an indirect role. In order to distinguish these other facts from facts strictly speaking, that is, facts as phenomena, an adjective may be added to the word "fact." The adjective specifies in which way a fact is not a fact strictly speaking. By contrast, facts strictly speaking, that is, facts that we do directly observe, may be called *hard* facts.

What follows are two types of facts that are not hard facts because we have not directly observed them. Machines often serve as substitutes for the human senses. We all agree to call certain events facts because machines have sensed them. By the definition proposed above, these are not facts strictly speaking or hard facts. They are *machine-registered* facts. The contact with the senses remains, however. Some machines are supposed to possess more powerful or finer replicas of our own senses. If we can safely conclude that

a machine has sensed something, we accept that as a fact. I refrain from entering into the variations on this theme.

None of us can be everywhere at all times. We therefore quite commonly accept as a fact certain events perceived by others and reported to us by various means. Again, these are not facts strictly speaking or hard facts. Instead, one might call them *transmitted* facts. The contact with the senses is not annulled. The facts did present themselves to senses, but just not to ours. In the case of many transmitted facts, it is almost impossible to resist accepting them as facts. For example, many people may tell us in detail about a certain event that we have not witnessed ourselves. Even so, a transmitted fact does not have the same quality as a hard fact.

#### Inferred Facts as a Special Type of Facts That Are Not Hard Facts

For our present purposes, yet another type of fact that is not a hard fact matters. It may be called an *inferred* fact. An inferred fact is a fact that *could have* appeared to our senses if certain obstacles had not prevented it from doing so. Again, the senses play a crucial role. But there is a difference with machine-sensed facts and transmitted facts. With the latter two types, there is *actual* contact with the senses. Only, these senses are not ours. These other senses serve as a substitute for ours. With inferred facts, however, the contact with the senses is not actual, only *potential*. There is no substitute. No one has ever sensed inferred facts. Another name for inferred facts would therefore be potential facts.

A further distinction among inferred facts is useful. It is the distinction between inferred facts that may some day become hard facts and inferred facts that will never be hard facts. In the case of many inferred facts, we assume that some day we might be able to harden them into facts strictly speaking when the means to do so have become available, or if not into hard facts, then at least into transmitted or machine-sensed facts. But in the case of some inferred facts, we accept that those means will never become available. These facts will always remain inferred. Nevertheless, in the case of many of these permanent inferred facts, there is a large consensus to accept them as facts.

What encourages us to accept the existence of inferred facts? Direct contact with the senses is not a possibility. Two main pillars on which the establishing of inferred facts rests are, first, facts that are hard, and second, the laws of thought. These two types of ingredients are the fiber of well-reasoned conclusions that certain facts could have presented themselves to our senses (that is, could have been facts strictly speaking) if the circumstances had been different.

A prime example of something that everyone would accept as an inferred fact of Middle Egyptian is that it had vowels, even if no one has ever seen or heard a Middle Egyptian vowel. The hieroglyphic script does not represent vowels. In this case, we know with near certainty that the means will never become available to make the existence of vowels into a fact strictly speaking. Yet, we all accept the existence of vowels as an inferred fact. A hard fact that can be adduced in support of this inferred fact is that all languages that are fully accessible have vowels. This hard fact can be coupled to an argument from reason, namely: Why would Egyptian have been different? How else could it have been?

Obviously, the management of inferred facts is much more cumbersome than that of hard facts. We cannot simply say, "Come here and look at this," or, "Can you hear this too?" Instead, arguments need to be produced to convince one that an inferred fact exists even though it cannot be observed. In constructing arguments to support an inferred fact, two key ingredients are, as noted above, hard facts and the laws of reasoning. In many cases, there is room for various degrees of controversy about inferred facts. Each case is different and needs to be evaluated in its own right. One cannot just *observe* by oneself or together with someone else. One must also *think* together with others.

#### Language as a Set of Inferred Facts

Different types of facts have been described above. The time has not yet come to define contiguity. But it may already be anticipated here that contiguity is an inferred fact. The notion that the final result of this attempt at defining contiguity is only the establishment of an inferred fact, not of a hard fact, may be disappointing. But then, everything truly essential to language consists of inferred facts. As a part of language, contiguity cannot be an exception. Now, this seems even more disappointing. Language is dear

to us. Nothing makes us more human. It presents itself as a most fascinating object of study. But the notion that its essence consists of inferred facts only, not of hard facts at all, makes it seem so out of reach. In fact, in addition to disappointment, one might also express surprise at the notion that the essence of language consists of inferred facts only. Language is constantly all around us. How can something that appears so evidently to everyone all the time consist of inferred facts only? The answer is that the mechanism that steers the production of language is logged entirely in the brain. Language is present in its entirety in the brain even when we sleep at night, just waiting to be activated again the next morning. There is nothing missing of language when we sleep. It is all there. Yet, it is obvious that we can observe nothing of language when we look at a person asleep. This shows us that all that is essential to language cannot be observed. When that person wakes up and begins to speak, he cannot suddenly have acquired language. Language must have been there before latently in the brain.

The words that we speak and hear are actualizations or externalizations of a structure that resides somewhere inside the brain. Among the tools allowing actualization and externalization are the speech organs and the ears. By actualization, I am referring to *acts* pertaining to language, as opposed to language itself as a constitution or configuration of unknown shape inside the brain. By externalization, I am referring to events pertaining to language happening *outside* the brain. Again, actualizations and externalizations are not the real language.

It is common to refer to words spoken and written as language. There is nothing wrong with this common usage of the word "language." But strictly speaking, observed words are not the essence of language. They are only events pertaining to language. One proof is as follows. If I hear or read words in a language I do not know, I cannot positively establish whether these words have anything to do with language. I may assume that they are not gibberish. But this is just an assumption, not a positive observation. This shows that the words themselves are not language. Something essential is missing. That essential thing is the knowledge of the language to which these words belong. Knowing the language implies having learned it. Learning is an activity of the brain. Of two people observing the same words, one who knows the language and one who does not, only the latter understands the words. From this simple observation, we learn that what is essential about language cannot be observed. Indeed, both persons mentioned have full access to all the observable facts. But only the one whose mind has the right disposition is able to make something of these observed words.

In sum, language appears to be a skill of the brain, a chemical disposition of a certain kind. This makes all of language an inferred fact for the time being. Perhaps, a century from now, readers of these pages will be able to disagree with what is said here and language will have become entirely accessible as a hard fact when advances in biochemistry have exposed its location and constitution in the brain.

Language cannot be observed. This does not mean that all we can infer about it is that it exists in the brain. It is possible to make additional inferred statements about what language looks like in the brain. These additional inferred facts include the most important fact of language. This fact towers high above all the other facts of language. This crucial inferred fact is called *the sign*. The sign is so important because languages consist entirely of signs. If contiguity is a part of language, then it too must be a sign. But what is the sign as an inferred fact?

#### The Sign, the Key Fact of Language, as an Inferred Fact

It was noted above that the existence of inferred facts must be supported by arguments based on hard facts and sound reasoning. If the sign is an inferred fact, it seems one should first produce arguments that make the existence of the sign a safe assumption before describing it. But for the sake of clarity, I will first describe the sign and only then point to hard facts that make its existence a safe assumption as an inferred fact.

Nothing in language exists without the sign. About a century ago, Saussure made the sign into the permanent foundation of the study of language by giving it the central place in a far-reaching theory of language in the *Course in General Linguistics*. But the idea of the sign itself was already well-known before him, as one can see from the works of Condillac, Taine, Boole, Whitney, and others. Thus, Boole

states in his *Investigation of the Laws of Thought* (1854), at page 24, "The elements of which all language consists are signs or symbols. Words are signs." It is clear from Boole's description that he defines the sign in the same way as Saussure.

What are signs? Each sign is best described, not as a thing, but as a link between two things. It follows that, when we describe a sign, we have to describe three items: the link itself and the two things that it links. It is assumed that each of these three things leaves a certain chemical imprint on the brain.

Of the three things that make up the sign, the link is the most important. One might in fact refer to the link by itself as the sign. It follows that the sign is somewhat abstract as a notion. It is not a thing, but a link between things. In other words, it is a relation between things. It is easier to think of things than of relations between things. Thus, when we see a sign along the road, it is normal to associate the term "sign" with the physical object. Yet, what makes that sign a sign is not the material of which it is made, but the fact that our minds recognize its message, or at least assume that there must be a message even when we do not understand it.

It is a fact that the sign does not nearly occupy the central place in linguistics that it deserves. The fact that it is a relation and not a thing, and is therefore more abstract, may have contributed to this state of affairs.

There is otherwise not much to be said about the sign-link itself. It must be a relay or wiring or chemical connection of some kind. We cannot say much more about sign-links as inferred facts than that they must exist for language to work as a tool of communication. However, their mere existence as an inferred fact will suffice for the following line of argument. Signs are the most important feature of the languages that we all speak.

We are left with describing the two items that are linked in the sign. The best way to describe the two sides of the sign is by means of an example. The presentation of the hard facts that allow us to accept the sign's existence confidently as an inferred fact is again postponed for the sake of clarity.

Saussure called the two things linked in the sign the signified and the signifier. The terms "concept" and "sound pattern" are mainly used instead in this grammar. The function of the sign is to signify, that is, to refer to reality outside us as we perceive it. The signifieds are pictures in the mind of reality as we perceive it. It is the task of the signifiers to signify the signifieds.

Signifieds and signifiers lead an independent existence. But neither signifieds nor signifiers are by themselves language. Nor are they together language. It is the link between them that makes them language. Each signified is linked to one signifier. One of these countless links is contiguity. It is only through their inextricable mutual dependence upon one another that signifieds and signifiers form language.

It appears, then, that the numbers *one*, *two*, and *three* can all three be connected with the definition of the sign. The sign is a unit in that it consists of *one* link between two signs. At the same time, it is also a duality. The link connects *two* items. Furthermore, the link and the two items that it connects add up to *three* items.

#### Defining the Sign by Means of an Example

Let us consider an example of a sign residing in the minds of English speakers and refer to this sign as DOG. I write the sign with capital letters primarily in order to distinguish the sign from the word *dog* and to indicate that no commitment is made yet as to what this sign actually is or where it is to be found. Indeed, the sign DOG is not really a word, but an item stored in the human mind. Like DOG, CONTIGUITY is a sign. The residence of the sign DOG in the minds of English speakers and of the sign CONTIGUITY in the minds of Egyptian speakers are inferred facts.

Of course, hardly anyone ever speaks of the sign DOG. One commonly refers to the word dog. But what do we mean when we think of the word dog? Perhaps, when one is pressed for an answer, the first thing that comes to mind is the word dog as an item in a dictionary, often marked in bold and always followed by a definition. Dictionaries are collections of words and dog is one of them. Defining the word dog as an item in a dictionary is easy on the imagination. One can readily relate to it. Everyone knows what a word in a dictionary is. But this definition does not even come close to defining what is fundamentally language in a word. Indeed, it overlooks the following obvious difference, so crucial to

language. Consider two persons looking at the word dog in the dictionary. One person knows English and the other does not. The word is the same in both cases. But the difference between the two cases is great. In the case of the reader who knows English, an event of language occurs. That reader is encouraged to think of a dog. In the case of the reader who does not know English, the word dog bounces off without effect from uncomprehending eyes. No event of language takes place. Since the word is the same and both readers have the same faculty of sight, the crucial difference must lie somewhere else. That somewhere else is the minds of those two people. One mind has stored the sign DOG. The other has not. What is this elusive sign located in the mind of only one of the two?

As noted before, DOG, like every sign, consists of a signified and a signifier. In the body of this grammar, I have referred to the two as the concept (signified) and the sound pattern (signifier). The sign DOG is located in its entirety inside the mind. There is no need to look outside the mind to find any part of it. True, events of language are commonly associated with what is outside the mind, the mouth and the speech organs and the ears. But these body parts are merely outlets. They are like the buttons of a radio. It is the inside of the radio that matters. Likewise, it is the mind that matters. What is the concept (signified) of DOG and what is the sound pattern (signifier) of DOG?

The concept of the sign DOG (linked to a sound pattern inside the mind) is the notion that we have of a dog, whatever that may be. No two people probably think exactly alike when thinking of a dog. Each mind harbors a slightly different version of the concept of DOG. In fact, even one person's impressions of a dog most probably constantly change over a lifetime. However, anyone's concept of what a dog is at any time has enough in common with anyone else's concept of the same that two people can have the impression that they are more or less talking about the same thing. What matters also is difference and distinction. As long as the concept that a speaker has of a dog is sufficiently distinct from any other concept he or she has of anything else and as long as the person with whom he or she is communicating exhibits this same distinction, they will communicate effectively and they will both be aware that they are speaking about a dog, as opposed to anything else that they could have spoken about. The key point is not that the concepts that a speaker and a hearer have of a dog are exactly the same. It is that these notions are sufficiently distinct from any other concepts in both their minds. Misunderstandings between speaker and hearer may occur. But continued conversation may provide additional information until the concept in question comes into focus.

We know hardly anything about what this code that stores the concept of a dog in the brain looks like. That is why concepts or signifieds are inferred facts and not hard facts. What encourages us to infer signifieds as facts is discussed below.

The sound pattern of DOG (linked to the concept or signified of a dog inside the mind) is also a code of some kind stored in the mind. This code allows the mind to direct the speech organs to pronounce the sounds. No one has ever observed this code itself. That is why the sound patterns or signifiers located in the brain are inferred facts and not hard facts. What encourages us to infer the existence of these inferred facts is discussed below. It is also important to distinguish the code of the sound pattern dog in the brain from the pronunciation of the sound pattern dog either by ourselves and heard by us or by others. We can hear pronunciations of the word dog. But we cannot observe what triggered those pronunciations in the brain. Yet it is what we cannot see that is the essence of language.

Neither the concept nor the sound pattern just described suffice to produce the sign DOG. A third element is needed: the link that connects the concept and the sound pattern. That third element by itself is the most important of the three. This sign-link too must be a chemical code of an unknown type. Somehow, when we see a dog, the concept of a dog is triggered in our minds. When we see a dog, we also think of one. And when we think of one, we may also activate a code in the brain that steers the speech organs to utter the word *dog*. This fact entitles us to assume that there is a link in the mind that connects our thinking of a dog to a code that can instruct the speech organs to pronounce the sounds *dog*. This link is the key element in the sign DOG. It might be referred to just by itself as the sign DOG. It can happen that we see something for which we have no word. The reflection of this observation in our minds is not a signified. On the other hand, we might utter meaningless sounds that are not attached to a concept. The code in the mind that produces these sounds is not a signifier. It is only when a specific concept is linked inside the mind to a specific sound pattern that language is born. We have no idea of what this sign-link looks like. But it is safe to assume the link's existence as an inferred fact.

The link in the mind between the concept of a dog and the sound pattern code *dog* is arbitrary in one way and mandatory in another. It is arbitrary because there is no reason why the concept of a dog should not be linked to the sound pattern *horse*. There is nothing that favors *dog* over *horse* as a sound pattern suitable to be linked to the concept of the canine animal in question. However, once we have made a free and arbitrary choice, we need to stick to it in order to communicate with one another and be understood. When, for whatever reason, the canine animal is associated with the word *dog*, we need to keep calling the animal a dog to avoid confusion. Likewise, once we decide to give a house pet a name, whatever that name may be, we need to stick to that choice. In this sense, the sign is mandatory.

The mandatory character of the sign has a *social* dimension. Several people need to agree to attaching a certain sound pattern to a certain concept. If we all agreed to name a dog "horse," there would be no problems of communication. We might feel awkward at first to change a sign-link that we grew up with. However, the fact that we have always called a dog a dog gives the false impression that no other sound pattern can ever be suitable. Yet, the choice of the link is random. Then again, once the choice is made, it needs to be locked in. It is this way with many things in life. We are often free to make choices, sometimes almost frivolously. But once a choice is made, a commitment is necessary. This is what Boole means when he states about the sign in his *Investigation of the Laws of Thought*, at page 25, "In the first place, a sign is an *arbitrary* mark. ... In the second place, it is necessary that each sign should possess ... a fixed interpretation."

So far, the sound pattern (signifier) has been described as a code in the brain that is wired to the speech organs in order to allow those organs to produce a specific sound. Another link runs from the sound pattern to the concept (signified). This link is the sign, the most fundamental fact of language. But there are other connections to the signifier. The signifier must be connected, not only to the speech organs, but also to the ear and the eye. When a speaker of English sees the written word *dog* on a page, the signifier is activated. Because of the link that exists with the concept (signified), the reader thinks of a dog. When a speaker of English hears the sounds *dog*, the signifier is also activated, and again the hearer thinks of a dog because of the sign-link. In sum, every sound pattern (signifier) appears to be a complex nerve center. It is activated when it instructs the speech organs to produce the sounds specific to it. It is activated when it identifies those same sounds because the eyes see the written symbols corresponding to the sounds. This cluster of chemical codes that is the signifier is connected as a unit to the signified by means of the link that is called the sign. No one knows precisely how the brain stores all this information.

This much for the basic definition of the sign by means of an example. Two crucial questions have remained unanswered. First, which arguments support the existence of the inferred facts mentioned above? Second, if sign-links are logged in the mind, how did they get there? Before addressing the concept and sound pattern of the sign CONTIGUITY, it will be useful to try to answer these two questions about the sign in general.

#### How Can the Sign Be Inferred as a Fact?

There are two main tools for inferring the existence of facts that cannot be observed: hard facts that *can* be observed and transparent logical reasoning. Some hard facts and what can reasonably be concluded from them are as follows.

English, French, and German speakers use different sounds to refer to a dog, namely *dog*, *chien*, and *Hund*. This fact is so self-evident that one does not readily realize what can be learned from it. A second fact is not so immediately apparent. But upon closer reflection, it is so obvious that there seems hardly any need to demonstrate it positively, even if such an exercise would not be entirely useless. This second fact is that English, French, and German speakers have roughly the same concept of a dog.

The following conclusions can be derived from these two facts. First, if the concept remains roughly the same in the three languages while the sound pattern changes, then the concept and the sound pattern must be two distinct things leading an independent existence. A word (as sign) is not *one* thing but *two* things. This can be proven by reasoning "from the absurd." Let us just assume that the word *dog* is one single thing. Consider this word in English, French, and German. On the one hand, the speakers of these three languages think of the same animal. On the other hand, they use different sounds. This would mean that

the word *dog* is both the same thing and not the same thing. It is not possible for one thing to be the same and different at the same time. This is "absurd." The conclusion that imposes itself is that words (as signs) consist of two things.

The second conclusion is that both things that make up any word reside in the mind. When English, French, and German speakers utter different sounds to refer to a dog, those sounds are triggered by a mechanism in the mind. The difference in pronunciation is therefore only superficial. The true difference lies inside the minds of the speakers of the three languages. The sound pattern is therefore much more than just articulations of the mouth. It is in the first place a code of the brain. So is the concept.

Third, the concept of a dog is unfailingly associated with the sound patterns *dog*, *chien*, and *Hund*. But the concept and the sound pattern are two different things. If two different things are without fail associated with one another, then they must be linked somehow. Since concept and sound pattern are both located in the mind, that link must itself be mental. This link is the most crucial connection in the structure of language. Yet we know nothing about it. We can only assume its existence from arguments that appear convincing. The sign is and remains an inferred fact. Its inferred character and its location in the unexplored recesses of the human brain give it an elusive quality. Accepting its existence is not based on observation, but on circumstantial hard facts and logic. We cannot point to the sign itself, only to arguments that support its existence. Yet, I believe, as many others do, that the sign is the keystone in the structure of language. It should therefore stand at the center of any analysis of language.

Fourth, the concept is not arbitrary but the sound pattern is. English, French, and German speakers looking at the same dog cannot imagine anything else than what they are seeing. They cannot imagine seeing a horse when they see a dog. The concept is not arbitrary. But the choice of sound pattern is. English, French, and German speakers use totally different sound patterns. Yet, communication is not hampered. Apparently, it does not matter which sound pattern one assigns to the concept of a dog. Then again, the animal in question is always called *dog* in English and is always called *chien* in French. Choices are random. But one needs to respect them once they have been made.

### How Does the Mind Acquire Signs?

Any mind endowed with language is in the possession of signs. Each sign consists of three things, a concept (signified), a sound pattern (signifier), and the link between the two. The crucial question arises: How did all this end up in the mind? It may be assumed that a newborn baby is not in the possession of these signs but acquires them.

There has been some discussion as to how well prepared the newborn mind is to receive language. This discussion has revolved around the question whether language is innate (that is, present at birth) or not. Everyone knows that babies are not born speaking. Everyone has seen toddlers struggle to acquire language. Language is definitely not innate in the full sense of the word. The question regarding innateness therefore has to be rephrased: Which innate features of the brain make babies especially predisposed to learning language? In trying to answer this question, we should beware, first of all, that we know next to nothing about the structure of the brain. It is therefore not possible to answer the question by relying on facts. To state that language is innate or not seems therefore futile at this time because there are no facts to support either statement. The discussion on innateness is in danger of turning into a theoretical quibble without any foundation in fact.

There is also a problem of definition. So many definitions of innateness are possible that the question whether language is innate or not has little meaning unless one defines beforehand what one means by the term. Consider two kinds of innateness other than the ability to use language. Newborn babies are predisposed to smell and to walk. But there is a difference. Smelling is unavoidable. We do not need to learn to smell. By contrast, walking requires learning. Is speaking more like smelling or like walking? The need to learn would seem to make speaking more like walking. But how informative is the statement that human beings are innately predisposed to walk because they have legs? Likewise, how informative is the statement that one needs a brain to speak? Are we saying anything more than that a brain at birth is more predisposed to speak than a sponge? Without a clear definition of what innateness is, choosing between innateness and non-innateness is irrelevant. Such a definition must be formulated in terms of features of the brain. And such features are beyond our grasp for the time being.

The crucial fact of language is the sign. Everything in language consists of signs. One thing is certain. The minds of newborn babies are free of signs. Arabic babies acquire a totally different set of signs than Korean babies. If signs were innate, one would expect to observe many more similarities between the signs of different languages. Naturally, most if not all languages are similar in having something like substantives (nouns) and something like verbs. But this is not necessarily due to innate-ness. It is because all people observe more or less the same world around themselves. This world contains solid objects. Words referring to these objects are called nouns. Events happen to these objects. These events are referred to by words called verbs.

Languages are large sets of signs. By this definition, language is not at all innate. Nothing of it is present at birth. Obviously, the brain must be somehow predisposed to acquire signs. The fact that all people do acquire signs fully proves this fact. But by making this observation, we have hardly said anything more than that a brain is predisposed to receive signs whereas a piece of wood is not.

With these remarks on innateness in mind, we now turn to the crucial question: If signs were not in the mind at birth, how did they get there? First of all, signs must obviously enter the mind from outside. Second, the mind enters into contact with what is outside itself by means of the senses. Third, how then do signs enter the mind from outside through the senses?

It will be remembered that the sign consists of three things, the concept (signified), the sound pattern (signifier), and the link between the two. But the three items do not enter the mind as a unit. The following example may clarify what happens when the mind acquires a sign, item by item.

Let us consider the sign DOG. A toddler growing up becomes aware of dogs by means of the senses, seeing them, hearing them, touching them. This sensing of dogs leaves a chemical imprint of some kind on the mind. This memory imprint provides the raw material for the concept or signified. But by itself, this memory imprint is not yet a signified. About the same time, the toddler repeatedly hears the three sounds d + o + g. This perception of the senses too leaves a chemical imprint on the mind. This second memory imprint provides the raw material for the sound pattern or signifier. But by itself, this second memory imprint is not yet a signifier.

For these two imprints to turn into a signified and a signifier, they need to be connected to one another. This connection is a third memory imprint of an unknown composition in the brain. Like the two other imprints, it enters the mind through the senses. What do the senses perceive that leads the mind to record a connection between the memory imprint that results from sensing dogs and the memory imprint resulting from hearing the sounds d + o + g?

A toddler growing up will repeatedly hear the sounds d + o + g pronounced when a dog is in sight. This third kind of observation, which is one of co-occurrence, establishes a connection between the reflection of a dog in the mind and the reflection of the sounds d + o + g in the mind. The repeated co-occurrence of the actual dog with the sounds d + o + g leaves its own memory imprint. Whenever such a connection becomes firm, one sign and a little bit of language is born. The reflection of a dog in the mind turns into a signified and the reflection of the sounds d + o + g turns into a signifier. The three together, signified, signifier, and the link between them, have become a sign. Again, one might also refer to the link itself as the sign. Nothing is more important to the structure of language.

As a sign, DOG is concrete. Other signs are more abstract. An example is FRIENDSHIP. This sign too enters the mind from outside through the senses, in the same way as the sign DOG does. First, there are certain deeds and gestures and words that make an imprint on the mind. This imprint provides the raw material for a signified. Second, the sound pattern *friendship* leaves an imprint on the mind. This imprint provides the raw material for a signifier. Third, the afore-mentioned deeds and gestures and words repeatedly occur when the sound pattern *friendship* is uttered. Consequently, the mind makes a connection. A new imprint is produced. The two imprints that this new imprint serves to connect become the signified and the signifier of the sign FRIENDSHIP.

The sign is the essence of language. But its existence cannot be positively proven at this time. The sign therefore remains an inferred fact. But the theory of the sign is derived from hard facts about how people behave when acquiring language.

The link that is the sign may be the essence of language, but more is needed to make language work as a tool of communication. Other connections need to be established. The speech organs must be able to

produce the soundpatterns *dog* and *friendship*. A connection must be established between the sound patterns or signifiers in the brain and the speech organs. One sees toddlers struggling to solidify these connections between mind and mouth, with much trial and error.

Two other connections are also necessary. They connect the sound pattern in the brain with the ears and the eyes. These connections make it possible for the sound pattern dog to be activated when the sound waves dog reach the ears and hence the brain or when light carries the written symbols representing the word dog to the eyes. The spoken word dog and the written word dog have no signified or concept attached to them as they are carried by air from the speaker's mouth to the hearer's ear or by light from the written page to the reader's eye. They are attached to the concept of a dog only inside the minds of speakers who know the language.

Language is not symbols written on a page, but a skill of the brain. One component of this skill is that a signifier can be activated in the brain when the eyes see written symbols that are the actualization of that signifier (not the signifier itself!). Reading hieroglyphic writing presupposes this skill. The last readers of Egyptian hieroglyphic writing died sometime soon after the fifth to sixth century A.D. With the decomposition of their brains, the afore-mentioned skill was lost. This skill had to be restored in the minds of living modern Egyptologists. This process is the decipherment. The decipherers were able to restore this skill in their own minds on the basis of fragmentary information combined with various insights. The key insights have been described in Appendix I above. Once this skill had been restored in the minds of some modern Egyptologists, it could be transmitted to the minds of others by teaching and publications.

### On Interpreting CONTIGUITY as a Sign

The above serves as background for providing a precise definition of contiguity. This preamble may seem long. Yet an attempt has been made to say nothing superfluous. It was important to explain what a sign is by means of a simple example such as DOG. If one claims that contiguity is part of Egyptian, then it should be possible to explain CONTIGUITY as a sign just as one explains DOG as a sign. After all, everything in language is signs. CONTIGUITY too must therefore consist of a signified, a signifier, and the link between the two. Ancient Egyptian minds ought to have observed something outside themselves by means of the senses that provided the raw material for the signified of CONTIGUITY, just as perceiving real dogs provides the brain with the memory imprint that will become the signified of the sign DOG. Furthermore, a certain sound pattern ought to serve as the other half of the sign, the signifier. The signifier of the sign DOG can be actualized and exteriorized outside the brain by means of the sounds d + o + g and the written symbols dog. The same should apply to the signifier of CONTIGUITY. Sounds or written symbols themselves are not connected to any concept or signified. Only when they enter the brain do they activate a signifier. Through the sign-link, the signifier activates the signified of the sign DOG.

On the Concreteness of the Experience that Provides the Raw Material for the Signified of CONTIGUITY

The signs of language find their origin in the engagement of the mind with the world outside itself. The crucial question arises: What did ancient Egyptians observe that in their minds became the raw material for the signified of the sign CONTIGUITY, just as seeing and hearing dogs became the raw material for the sign DOG?

This question implies an important distinction within contiguity. Contiguity is a feature of language, namely as the sign CONTIGUITY. This sign consists of a signified, a signifier, and the link between them. But contiguity is also a feature of reality as we perceive it. The sign CONTIGUITY is born from the need to refer to the feature of reality with the same name. The feature of reality becomes language when its reflection in the mind turns into a signified by virtue of being attached to a signifier.

It is important to describe contiguity not only as a feature of language but also as an observed feature of reality. Contiguity ultimately ought to be something that we can easily relate to, something that we can all readily observe in daily life, just as ancient Egyptians must have. This would clarify why a need was felt to refer to this phenomenon in every day speech.

The term "contiguity" is compact. This compactness results in great part from the convenience of having a one-word term available to denote a phenomenon. The term "contiguity" had to be newly chosen

because the phenomenon it is meant to denote had not quite been defined properly, let alone been given a name. The sign CONTIGUITY ought to relate to something that we can all see, in the same way that the sign DOG relates to something that we can all see. True, some of the things that we observe are more abstract than others. For example, the sign FRIENDSHIP refers to something less immediately apparent to the senses than the sign DOG. Even more abstract is the sign PAST TENSE found in the past tense verb form *worked*. Nevertheless, we all have a sense of what it means for an event to be past tense, that is, for that event to have occurred before the time of speaking or writing. On the scale from very concrete to very abstract, the sign CONTIGUITY is closer to the sign PAST TENSE than to the sign DOG.

# Three Main Characteristics of the Observation That Lies at the Origin of the Signified (Concept) of CONTIGUITY

What out there in reality is perceived by us as the discrete and distinct phenomenon here called contiguity? I have presented definitions of contiguity in the works listed on page lxviii. But I would like to take the opportunity to add sharper focus to these earlier definitions. Certain events out there in reality must have been observed by everyone and created a desire on the part of human beings to describe them in language. The following definition focuses on three main characteristics of these events. A phenomenon such as a dog is so concrete that one does not even need to define it. By contrast, contiguity is much more abstract. No effort should therefore be spared in defining it as precisely as possible in order to confirm that contiguity is indeed as real as an observed phenomenon as a dog is.

The first characteristic locates the observed phenomenon of contiguity in the totality of all that we observe. Contiguity pertains to perceived relations between events. The second characteristic indicates which type of relation between events is concerned. It is one of perceived relative closeness in time between two events, that is, a pairing up or clustering of two events in relation to all other events. The third characteristic pertains to an impression that can arise in the observing mind regarding two objects that are close in space and therefore also regarding two events that are close in time. This impression is that the objects come so close that they pass one another and that the order between them is inverted. The term "contiguity" stresses the second characteristic the most. The third characteristic receives perhaps less attention in the term "contiguity" than it deserves. But it is the closeness between events described in the second characteristic that is the direct cause of the impression described in the third characteristic. The three characteristics may now be reviewed in turn.

# First Main Characteristic of the Observation Lying at the Origin of the Signified of CONTIGUITY: Relation between Events

Contiguity has everything to do with how events relate to one another. Our lives are full of events. These events relate to one another in certain ways. Two obvious and basic relations are that events can occur at the same time and after one another in succession. Already with this first characteristic, we have moved into abstract territory. Relations between events are not as immediately observable as the events themselves are. But they are no less real.

# Second Main Characteristic of the Observation Lying at the Origin of the Signified of CONTIGUITY: Relation of Relative Closeness between Two Events

The two-way distinction between successivity and simultaneity mentioned in the previous section is not fine enough. In the perpetual chain of events of which our lives consist, two events may pair up, happening relatively closely to one another in relation to all the other events. Such two events are not quite successive and not quite simultaneous. They are close, that is, touching or even overlapping. They can also be described as adjacent, adjoining, and connecting. One obvious synonym for all these terms is "contiguous." "Contiguity" then becomes a convenient choice to denote the readily observable phenomenon that two events can be close to one another and can therefore also be observed as being close. The need arises to refer to this closeness in the language. An example of two events that are contiguous is "arrive" and "give" in a sentence such as "When I arrived, I gave it to him." The giving follows rather soon upon the arriving. Another example of two contiguous events is "dawn" and "take a

shower" in a sentence such as "When it dawned, I took a shower." In this case, the two events even overlap. It continues to dawn as I am taking my shower. Hardly any word in the English language more quintessentially refers to contiguity between events than "soon," as in "I arrived and soon found myself ..." and in "No sooner did I arrive than I...."

Third Main Characteristic of the Observation Lying at the Origin of the Signified of CONTIGUITY: Inversion as a Partly Imagined Form of Extreme Closeness

This third characteristic concerns a specific and well-documented impression that can arise in the mind when one observes two events that are close. Contiguity is all about events relating to one another in *time*. But to describe this third characteristic of contiguity, an example from this other dimension, *space*, may be adduced. Time is very often described in the language of space. Simple examples are the statements "This event is now behind us" and "This event is still before us."

Events cannot only be close. They can also get closer. An element of movement is introduced. We often perceive objects getting closer. What is more, objects getting closer very often pass one another, like two cars on a road or two people on a sidewalk. In that sense, passing often appears to us as the final outcome of getting closer. Passing may take on the appearance of an extreme or exaggerated form of getting closer. People apparently become subject to this impression and also voice it. One famous example occurs in the motion picture A Day at the Races. Groucho Marx's character stands close to a lady and states, "If I'd hold you any closer, I'd be in back of you." Apparently, it is natural to think of being very closely in front of someone as being behind someone. The sequence or order of the two persons then becomes inverted. Being behind someone becomes an extreme or exaggerated form of being closely in front of someone. It has been noted that contiguity is fairly abstract. Now it appears that it is also to some extent a figment of the mind. It is not possible to stand that close to a person that one actually stands behind her. But it is easy for the mind to be tempted into imagining this inverted order when observing a movement of ever increasing closeness. Movements in a certain direction naturally lead us to imagine the continuation of that movement. Thus, when someone pretends throwing something at us, we may automatically duck, anticipating the movement's continuation. This imagination of continued motion is further encouraged by the real observed fact that objects getting ever closer do in fact often pass one another. I strongly suspect that the perception of motion plays an important role in what we perceive to be contiguity.

This much for an example from the dimension of space. On to time. Time is very often described in terms of space. In fact, the principal way of thinking about the progress of time is in terms of a line, the so-called time-line. Humanity travels collectively from left to right on this horizontal line. The moving point that is ours on the line is the present. What is behind us on the line is the past. What is before us is the future.

Just as two things can be close to one another, so can two events. And as one imagines these two events getting ever closer, it is also possible to present them in the opposite order as an extreme form of closeness. An example is "No sooner did he arrive than he ate." The arriving happens before the eating. Yet, it i presented as happening "no sooner," that is, "at the same time *or later*."

The human imagination is real. But it does not always exactly correspond to events happening outside the mind. Contiguity is a case in point. Inverting the order of events to express extreme closeness is to a considerable extent a product of the imagination. But not entirely. Consider the statement, "No sooner did it dawn than he got up and took a shower." It is an observable fact that it continues to dawn as he is taking his shower. In other words, the end of dawn falls *after* the beginning of taking a shower. The inversion of events therefore at least partly corresponds to reality. Overlap is also a possibility in examples such as "No sooner did he arrive than he ate." Arrival has a certain extension in time. It is not merely a spatial event, namely reaching a certain location. Its end cannot be measured exactly, neither in time nor in space. Arrival includes the whole ambiance surrounding the reaching of a location. In this sense, it is possible for the eating to begin before the whole event of the arrival is completely finished.

### The Signified of Contiguity Briefly Defined

The observations of reality described in the previous sections provide the material for what becomes the signified of the sign CONTIGUITY. Contiguity is something perceived in the world outside us. It becomes language when its reflection in the mind is connected to a signifier. A one-sentence definition of

the signified of CONTIGUITY may be useful. It is the impression arising naturally in the mind that two events that are close to one another get closer and closer to the point of inverting their order. One event is perceived to occur so close before another event that it is imagined as happening after that other event. To which kinds of signifiers can this impression be attached in order to become part of language?

The Signified (Concept) of CONTIGUITY in a Sense Does not Have a Signifier of Its Own

The phenomenon of contiguity, while being very real, has a certain abstract quality, like the phenomena of friendship and past tense and unlike the phenomena of dog and house. This abstract quality makes it more difficult to discern contiguity as a discrete phenomenon. For the sake of clarity, the phenomenon has been presented above as consisting of three main characteristics. First, contiguity pertains not to events but to relations between events. Second, it pertains to two events that are close to one another (the term "contiguity" refers mainly to this second characteristic). Third, the events are so close that their order is imagined as being inverted.

One signifier of contiguity is the sound pattern "(no) soon(er)." But the focus of the present appendix is on another type of signifier of contiguity. It occurs in Middle and Late Egyptian. The signified of contiguity is already rather abstract. The signifier under consideration only adds to the abstractness of the sign CONTIGUITY. It is not quite a signifier, but rather a *combination* of two other signifiers. This specific combination of signifiers becomes itself a signifier in its own right. The co-occurrence of the two signifiers signifies contiguity.

The fact that contiguity does not have a signifier of its own only adds to the difficulty of discerning contiguity as a discrete feature of language. Its signifier is not a thing but a *combination* of things. However, by the powers of abstraction, that combination too can be viewed as one thing in its own right.

Which two signifiers in combination serve as the signifier of contiguity? They are the signifier of the sign INVERSION OF EVENTS and the signifier of the sign ISOLATING CONTRAST. The signifiers of these two signs signify the combination of the signified of inversion of events and the signified of isolating contrast.

First Component of the Composite Signifier Used to Signify CONTIGUITY: The Signifier Signifying Inversion of Events

The essence of contiguity is the partly imagined inverted order of the occurrence of two events. This imagined inversion results from perceiving the two events as occurring closely after one another in time. All one needs to do therefore is simply to present the two events in inverted order. But language already has a signifier to do just that. Consider the example cited above, "If I'd hold you any closer, I'd be in back of you." At the origin of this statement lies a certain observation of reality, namely: I stand very closely in front of you. This observation tempts me to imagine that I stand so close in front of you that it seems as if I stand behind you. To describe this imagined perception, I simply re-use the signifier signifying that I do indeed stand behind you, namely "I'd be in back of you." "In back of you" can also mean that I actually stand behind you. But here, it is re-used to denote that I stand so closely in front of you that I am imagining that I stand behind you.

The obvious question arises: How do we know whether "I'd be in back of you" means that I stand behind you or in front of you? One might argue that an onlooker would see which is the case. But one hesitates to assume that a language would be ambiguous regarding such a basic difference as that between being behind you and being in front of you.

This is where a second component comes in, the signifier of isolating contrast. The signifier of inversion of events and the signifier of isolating contrast collaborate as a fine clockwork. First, inversion of events and isolating contrast are signifieds. Second, the combination of their two signifiers signifies them in combination. Third, the combined signifieds of inversion and isolating contrast serve as the signified of contiguity, which does not have a signifier of its own.

Second Component of the Composite Signifier Signifying CONTIGUITY: The Signifier Signifying Isolating Contrast

By itself, the first component of the signifier of contiguity signifies the inversion of events, just that. This by itself is not contiguity. Contiguous events are not really inverted. They are only imagined as being inverted. An additional signifier is needed to signify that the inversion is only imagined. This other signifier by itself signifies isolating contrast, just that. The signified of isolating contrast is described in more detail on pages xlix-lii.

An instance of the sign ISOLATING CONTRAST occurs in "He came *Saturday*" (implying, say: "not Friday"). "*Saturday*" is pronounced with a slight rise in pitch. The code in the brain that instructs the speech organs to produce that rise in pitch is one possible signifier of isolating contrast. It is a spoken actualization of the signifier. The same signifier in the brain can also be actualized in writing by the use of italics.

A distinction is necessary within the role that the signifier of isolating contrast plays in contiguity. This signifier by itself already signifies two things. This further fragments the signifier of contiguity. Two examples from English may illustrate the double role of isolating contrast.

The first example is "If I'd hold you any closer, I'd be in back of you." The phrase "in *back* of you" is pronounced with a slight rise in pitch. This special pitch signifies isolating contrast. The result is that "in *back* of you" implies "not in *front* of you as you might think." You might think "in *front*" because you see that I am actually in front and not *behind*.

What is the double role of isolating contrast in "I'd be in *back* of you"? First, it indirectly invokes what is actually the case, namely that "I am in *front* of you." The reality that I am in front of you is not denied. How could it be? It is invoked as the implied opposite of "being *behind* you." Second, isolating contrast indicates that I do wish to imagine myself standing *behind* you, in flagrant contradiction with what is visible and observable to all.

The second example, "No sooner did he arrive than he talked to her," exhibits the same combination of inversion of events and isolating contrast. "No sooner ... than..." is an unusual expression. Its round-about way of stating that I arrived and talked to her has the same double purpose. First, it presents the events in inverted order. "No sooner" in "No sooner did he arrive than he talked to her" clearly implies "He arrived as soon as or after he talked to her." It therefore also implies "He talked to her *before* he arrived." Second, "no sooner ... than ..." suggests by isolating contrast that the talking unexpectedly happened *before* the arriving.

#### The True Signified of Contiguity When the Signifier of Isolating Contrast Is Used

As a phenomenon of reality, contiguity has three main characteristics. These characteristics have been described above. This much for contiguity as a perception of reality. But how to refer to the perception of this complex phenomenon in language? The present concern is with one specific means by which language achieves this. In this specific means, reference to contiguity is achieved by the combined reference to two other phenomena, inversion of events and isolating contrast. The signifiers of these two signifieds each signify signifieds of their own. Inversion of events and isolating contrast may be signified independently from one another when they are perceived in their own right. But their jointly being signified can be used in language when contiguity is perceived in reality.

#### A Generic Middle Egyptian Example of Contiguity

One finds the two signifiers of inversion of events and isolating contrast in a generic Middle Egyptian example such as *jj.n.j jm jr.n.j nn* "when I came there I did this." The combination of the two signifiers signifies contiguity. The literal meaning of the example is "It is after I did this that I came there." First, the sequence of the events is inverted. Second, isolating contrast affects "after I did this": it is in that circumstance that I came there and in no other. The contrast indirectly refers to what is in fact the case, that I came there and then did this. But the contrast also indicates my desire to *imagine* the sequence of events differently. The two events followed one another that fast that I had the impression that the later one occurred before the earlier one. There is otherwise no reason for using isolating contrast here. Its purpose must therefore be to combine with the signifier of inversion to signify contiguity.

In the beginning of the twentieth century, a sentence such as *jj.n.j jm jr.n.j nn* would have been interpreted without fail as "I came there and I did this," as two juxtaposed verb forms. Then Polotsky

showed that, in certain contexts, it could mean "it is after I did this that I came there," with isolating contrast. However, in contexts in which isolating contrast by itself is out of place, the use of isolating contrast in combination with presenting the events in inverted order can produce the meaning "when I came there I did this," in the sense of "no sooner did I come there than I did this." This comes close to the translation that would have been applied automatically in the beginning of the century. Why change the interpretation of the sentence structure if the meaning of the sentence is not all that much affected? Consideration of the new facts that have become available since then necessitates this change.

### Past Research

There are occasional references to facts pertaining to contiguity in writings by Polotsky from 1957 to 1965, but no systematic discussion. I have fisted and discussed all these references in the publications cited on page lxviii. Later references in the works of Polotsky's students, also listed there in full, report on his teachings. It has been remarked about my Conjunction, Contiguity, Contingency (1993) that I discussed Polotsky's remarks only in footnotes. But every single reference to works by others in that book appears in footnotes, without a single exception. The theory of contiguity does otherwise build squarely on what comes before, in this case mainly Polotsky's writings. But there was room for innovation. First, in a presentation of certain facts relevant to contiguity, Polotsky urged the construction of a theory accounting for these facts in 1957. Second, if there is anything to these facts, why were Polotsky's remarks regarding their importance, now three to four decades old, not taken anywhere by anyone for so long? Third, there is some conflation between sentences that exhibit contiguity and others that do not in Polotsky's work (see note 8 [in line 3, switch "1" and "2"] on page 25 in the ZÄS article cited on page lxviii). Fourth, contiguity is presented in this appendix and in the works listed on page lxviii as part of a comprehensive theory that is itself rooted in a comprehensive theory of the structure of language. Fifth, the distinction between contiguity by simultaneity and contiguity by anteriority, which I have discussed elsewhere, is new.

# APPENDIX VII SAMPLE SYLLABUS





### Introduction to Classical hieroglyphic Egyptian

Course number: EGYT1310
Semester: Fall of 2011
Instructor: Leo Depuydt
Assisted by: Julia Troche

Office: Wilbour Hall, second floor (red-brick building next to the Rock)

Office hours: To be determined

E-mail: Leo_Depuydt@brown.edu, Julia_Troche@brown.edu

Box: 1899

#### REQUIREMENTS FOR CREDIT

• (1) Class attendance and preparedness. Please let me know if you will be absent (except for High Holidays).

- (2) Cumulative informative quizzes on alphabetical and five groups of biliteral signs, concluded by a comprehensive formal quiz on all these signs.
- (3) Four tests, partly overlapping. Practice tests will be provided beforehand.

**Test 1** (Wed, **October 5**): Lessons 1-10 (pp. 7-104)

**Test 2** (Mon, **October 31**): Lessons 9-15 (pp. 89-179)

**Test 3** (Mon, **November 21**): Lessons 14-20 (pp. 147-233)

**Test 4** (scheduled by the University): Lessons 19-23 (pp. 224-329)

- (4) Composing an Egyptian story.
- Note: The four tests are by far the most important component.

#### STUDY MATERIALS

- Introduction and Lessons 1-23 (pp. 1-329) of the textbook *Fundamentals of Egyptian Grammar, I: Elements*.
- Outline of the Egyptian verbal system. To be distributed later.
- (Possibly) Two short texts. To be distributed later.
  - (1) The Canal Inscription
  - (2) Spells for Protecting a Newborn Child

Please read and study the lessons listed and their exercises by the date indicated.

[Wednesday, September 7: Introductory

remarks. Items of

business.]
Lesson 1

Friday, September 9:

Monday,	September 12:	Lesson 2
Wednesday,	September 14:	Lesson 3
Informal sign quiz: alphabetical.		
Friday,	September 16:	Lesson 4
Informal sign quiz: alphabetical; g	roup 1 of biliteral.	
Monday,	September 19:	Lesson 5
Informal sign quiz: alphabetical; g	•	
Wednesday,	September 21:	Lesson 6
Informal sign quiz: alphabetical; g	<u> </u>	
Friday,	September 23:	Lessons 7-8
Informal sign quiz: alphabetical; g	1	<b></b>
Monday,	September 26:	Lesson 9
Final formal sign quiz: alphabetica	•	<b>De</b> sson y
Wednesday,	September 28:	Lesson 10
[Friday,	September 30:	No class.
[Friady,	sepiemoer 30.	Rosh
		Hashanah.]
Monday,	October 3:	Lesson 11
•		
Wednesday,	October 5:	Test 1
		(Lessons
		<i>1-10</i> )
Friday,	October 7:	Lesson 11
[Monday,	October 10:	No class.
		Columbus
		Day Holiday
		.]
Wednesday,	October 12:	Lesson 11
Friday,	October 14:	Lesson 12
Monday,	October 17:	Lesson 13
Wednesday,	October 19:	Lesson 14
Friday,	October 21:	Lesson 15
Monday,	October 24:	Lesson 15
Wednesday,	October 26:	Lesson 15
Friday,	October 28:	Lesson 16
Monday,	October 31:	Test 2
nzonady,	000000 31.	(Lessons
		9-15)
Wednesday,	November 2:	Lesson 17
Friday,	November 4:	Lesson 17
Monday,	November 7:	Lesson 18
Wednesday,	November 9:	Lesson 18
Friday,	November 11:	Lesson 19
Monday,	November 14:	Lesson 19
Wednesday,	November 14:	Lesson 20
Friday,	November 18:	Lesson 21
Tilday,		
Monday,	November 21:	Test 3
		(Lessons
		<i>14-20</i> )
[Wednesday,	November 23:	No Class.
		Thanksgiving
		Holiday.]
Monday,	November 28:	Lesson 21

If there is time in the final sessions, a general sketch of what verb forms look like may be presented. It is unlikely that there will be time for reading one or two texts unless progress has been unusually swift.

Wednesday,	November	30:	Lesson 22
Friday,	December	2:	Lesson 22
Monday,	December	5:	Lesson 23
Wednesday,	December	7:	Lesson 23

At the time scheduled by the University: Test 4 (Lessons 19–23)

### A NOTE ON TEACHING WITH THIS BOOK

As reported in the addition to the Preface, in using this book to teach, I cover pages 1-329 in the first semester and conclude the semester with some general impressions about the verbal system. The time that I spend on pages 331–564 in the second semester varies greatly. Sometimes, it serves as nor more than the basis for a mere first flyby of the verbal system. I have otherwise taught the verbal system in various different ways.

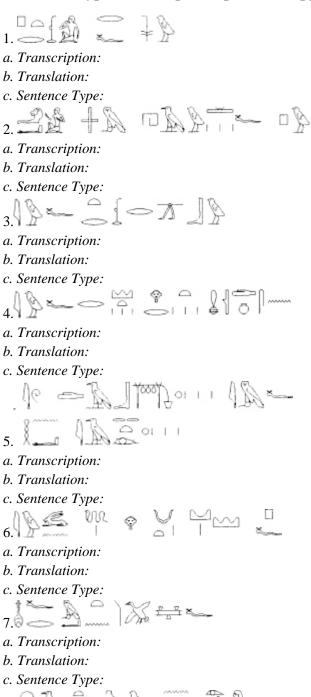
As has also been noted in the addition to the Preface, any follow-up to *Fundamentals of Egyptian Grammar*, *I: Elements* will need to be organized entirely differently for a number of reasons. It is also possible that tools describing the more difficult facets of Middle Egyptian are published separately. Meanwhile, learning the elements of Middle Egyptian by means of the present book leaves one free to imagine the verbal system according to any theory that might strike one's fancy.

# APPENDIX VIII SAMPLE TEST

Monday,	November	21, 2011, 10:00 a	.m. EGYT1310.	, Brown Universit	v
······································	TOTCHINCE	<b>21, 2011, 10:00 u</b>	inii LGIIIIV	, Diowin Cinversit	J

TEST III: Lessons 14–20 ...... 12:





a. Transcription:b. Translation:

- c. Sentence Type:
- 9.1-12 00 12 25-
- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:



- a. Transcription:
- b. Translation:
- c. Sentence Type:

19.	
a. Transcription:	
b. Translation:	
c. Sentence Type:	
20. 8 000 0 0 10 10 0	
a. Transcription:	
b. Translation:	
c. Sentence Type:	into Farmtian maniding both (a)
B. Please translate the following ten phrases and sentences transcription and (b) hieroglyphic version. 4 points each.	into Egyptian, providing both $(a)$
1. What is your name?	<i>(a)</i>
(b)	
2. I am Pepi.	<i>(a)</i>
(b)	
3. Where are you?	<i>(a)</i>
(b)	
4. I am in my father's house.  (b)	(a)
5. He is with my mother.	<i>(a)</i>
(b)	
6. There is bread there.	<i>(a)</i>
(b)	
7. She is beautiful.	(a)
<ul><li>(b)</li><li>8. He is a beautiful man.</li></ul>	(a)
(b)	<i>(a)</i>
9. They are farmers of Egypt.	(a)
(b)	
10.I am with them.	<i>(a)</i>
C. Please briefly answer the following questions. 5 points each.	
1. How can the particle $mk$ be conjugated?	
2. How does the status of $pw$ as an enclitic word affect its position in	the sentence?
2. How does the status of $\mathcal{L}_{pw}$ as an elicitic word affect its position in	the sentence:
3. What is the pattern of adjectival sentences?	
4. How do A, and relate to one another?	
, =	



dw3 nr = "giving thanks, Thanksgiving"
 (literally, "worship the god")

### **VOCABULARY**

No vocabulary, Egyptian-English or English-Egyptian, is provided here. The title of this section is therefore perhaps slightly misleading. But it seemed worthwhile to mention the motives for omitting vocabulary explicitly. First of all, the vocabulary needed for the exercises is produced elsewhere when and where needed. There are also lists of some common substantives, adjectives, adverbs, prepositions, and verbs. See

#### pages 82–87, 103, 120–23, 152–53, 175–78, 320–28, 386–87

Why re-combine and re-alphabetize these lists? Second, many examples illustrating points of grammar contain new words. These words are identified on the spot by transcription and translation. New hieroglyphs found in them are identified by their number in the sign-list in Gardiner's *Egyptian Grammar*. These signs can also be looked up in the list of signs on pages 733-67. Providing a short dictionary exceeds the scope of this work. The only Middle Egyptian-English dictionary convenient in size and price is Raymond O. Faulkner's. It is a useful tool. Rainer Hannig has published a pocket-size Egyptian-German dictionary.

### **HIEROGLYPHIC SIGNS**

[Summary of the sign-list in Alan H. Gardiner's Egyptian Grammar, tailored to the scope of the present work.]

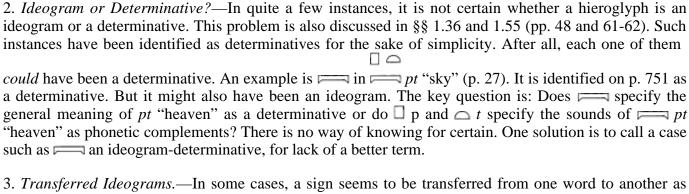
[An index to this sign-list is found on pages 769–74.]

ONLY HIEROGLYPHIC SIGNS used in this work with the values they exhibit in any examples given in this work are listed. The following list is not a reference tool representative of how hieroglyphic signs are used in Middle Egyptian. Its purpose is only to make the present work self-sufficient. But the list does contain most that is common. Hieroglyphs are identified by the letter and number they bear in the sign-list found at the end of Alan H. Gardiner's Egyptian Grammar. More details are found in Gardiner's list, which was compiled for the grammar's first edition of 1927. The list remained essentially unchanged in the second and third editions of 1950 and 1957. A scientific update of Gardiner's list would be a task of formidable proportions. Each sign would require a hefty tome. Most hieroglyphs were used for 3000 years or more. They exhibit considerable variation in shape and usage over this period. To record all this variation, countless documents would have to be examined in the original, or at least in a good photograph. Just from a logistic point of view, the effort would be considerable. Perhaps, when a large number of documents are scanned and available over the Internet, a detailed study of hieroglyphic writing on a scientific basis will become possible. A comprehensive study would also need to include an account of the history of research on each sign, beginning with the decipherment.

#### REMARKS ON THE FOLLOWING LIST OF SIGNS

1. *Illustrations of Use as an Ideogram.*—The use of signs as ideograms is illustrated in the following list by referring to one instance of it in this grammar. An example is:

D50 finger **Ideo(gram)** in 
$$b^c$$
 "finger" (p. 114)



3. Transferred Ideograms.—In some cases, a sign seems to be transferred from one word to another as part of a cluster of signs. Such a sign is difficult to classify as an ideogram, a phonogram, or a determinative. For example, (E8) depicts a kid goat and is clearly an ideogram in  $jb^{F27}$  "kid goat." But was apparently transferred as part of the cluster into another word,  $jb^{N35-A2}$  "thirst." is now no longer an ideogram. It no longer refers to the concept of a goat. Nor, for that matter, does it have anything to do with the concept of thirst. Classifying is difficult. One may perhaps call in jb "thirst" a transferred ideogram.

4. The signs D12, F36, F38, 042, V9, and Z8 are listed only because they appear in an exercise on locating signs in the sign-list (see p. 63).

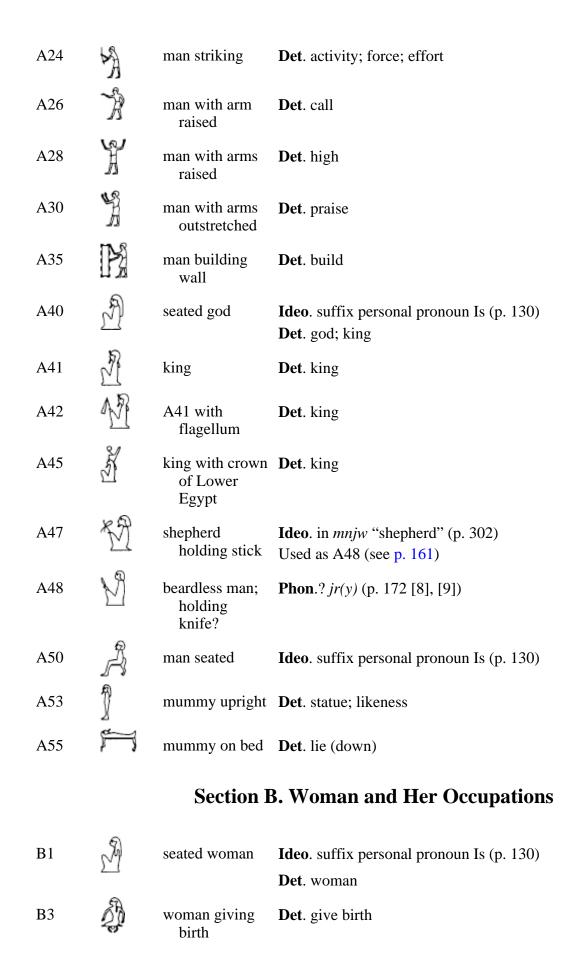
### **Abbreviations**

Ideo.	=	Ideogram
Phon.	=	Phonogram
Det.	=	Determinative

[These three terms do not refer to hieroglyphs but to *functions* of hieroglyphs (p. 51, § 1.39). Not every hieroglyph can be classified unambiguously under one of the three functions. Thus, quite a few hieroglyphs could be either ideograms or determinatives or something in between (pp. 734–35). Other hieroglyphs have been transferred from words in which they did have one of the three functions to words in which they no longer do (p. 735).]

### Section A. Man and His Occupations

		image depicted	functions denoted
A1	ř	seated man	<b>Ideo</b> . suffix personal pronoun Is (p. 130) <b>Det</b> . person; man
A2	Ñ	man with hand to mouth	Det. activity of mouth or mind
A3	NA CANA	man sitting on heel	Det. sit
A7	Â	man sinking to ground	Det. weak; weary
A9		man steadying W10 on head	Det. load; carry; work
A12	A	soldier holding bow and quiver	<b>Ideo</b> . in <i>mš^c</i> "army" (p. 84 [36])
A13		man with arms tied	Det. enemy
A14	N	man with blood issuing from head	Det. enemy
A17	j)	child sitting with hand to mouth	<b>Ideo</b> . in <i>rd</i> "child" (p. 118 [46]) <b>Det</b> . young
A19	À	bent man leaning on stick	<b>Ideo</b> . in wd "chief (p. 91) and in smsw "eldest" (p. 280) <b>Det</b> . old
A21	Ŕ	man holding stick	Det. dignitary



### **Section D. Parts of the Human Body**

D1	න	head in profile	<b>Ideo</b> . in <i>tp</i> "head" (p. 83 [10]) <b>Phon</b> . <i>tp</i>
D2	Ŷ	face	<b>Ideo</b> . in <i>r</i> "face" (p. 83 [12]) <b>Phon</b> . <i>r</i>
D3		hair	Det. hair; mourn; defective
D4	4	eye	Ideo. in <i>jrt</i> "eye" (p. 83 [13]) Phon. <i>jr</i> Det. see; activity of the eye
D5	203	eye touched up with paint	<b>Phon</b> . $j(3)r$ <b>Det</b> . see; condition of the eye
D6	263	alternative to D5	Used as D5
D12	0	pupil of the eye	See p. 63
D19		nose, eye, cheek	Det. nose
D21	0	mouth	<b>Ideo</b> . in <i>r</i> "language" (p. 7) and <i>r</i> "mouth" (p. 83 [15]) <b>Phon</b> . <i>r</i>
D26	J-A≥	liquid issuing from lips	Det. spit
D28		arms extended	<b>Phon</b> . <i>k3</i>
D32	$\bigcirc$	arms enclosing or embracing	Det. embrace
D33	₹	arms engaged in rowing	Phon. n
D34		arms holding shield and axe	<b>Ideo</b> . in ^c 3 "fight" (p. 358)
D35		arms in gesture of negation	<b>Ideo</b> . in <i>n</i> and <i>nn</i> "not" (p. 250) <b>Det</b> . negation
D36		forearm	<b>Ideo</b> . in ^c "arm" (p. 83 [18]) <b>Phon</b> . ^c Not transcribed after <i>m</i> (p. 25)
D37		forearm, hand holding X8	<b>Ideo</b> . in <i>rd</i> ( <i>y</i> ) "give" (p. 444) <b>Phon</b> . <i>d</i> Not transcribed after <i>m</i> (p. 226)

D38	<u></u>	forearm, hand with round loaf	Not transcribed after $m$ (p. 222 [18])
D40	<b>—</b>	forearm, hand holding stick	<b>Det</b> . activity; force; effort Not transcribed after <i>m</i> (p. 239)
D46		hand	<b>Ideo</b> . in <i>rt</i> "hand" (p. 83 [17]) <b>Phon</b> . <i>d</i>
D49		fist	Det. grasp
D50		finger	<b>Ideo</b> . in $b^c$ "finger" (p. 114) <b>Det</b> . finger; $\int \int \int d^2 x  dx$
D52	F	phallus	<b>Ideo.?</b> in <i>k3</i> "bull" (p. 118 [38]) <b>Phon</b> . <i>mt</i> <b>Det</b> . male
D53		phallus with liquid issuing	<b>Det</b> . that which issues from D52; that which is in front; male
D54	Δ	legs walking	Det. motion
D56	J	leg	<b>Ideo</b> . in <i>rd</i> "leg" (p. 79)
D58		foot	Phon. b
D60	Ø	D58, vase, and water issuing	<b>Ideo</b> . in <i>w</i> ^c <i>b</i> "pure" (p. 114)
D61	111	toes	<b>Phon</b> . <i>s3</i>
			Section E. Mammals
E1		bull	Det. bovine
E3	KK	calf	Det. calf
E6	FA	horse	<b>Ideo</b> . in <i>ssmt</i> "horse" (p. 11)
E7	ST)	donkey	Det. donkey
E8		kid	<b>Det</b> . kid; herd; cattle <b>Ideo</b> . "transferred" (see p. 735) from <i>jb</i> "kid" to <i>jb</i> "thirst"
E9	S.	newborn hartebeest	<b>Phon</b> . jw

E13	Ja .	cat	Det. cat
E16		recumbent dog on shrine	<b>Det</b> . in <i>Jnpw</i> "Anubis" (the god) (p. 163)
E23	ک <del>ے</del> کے	lion	<b>Ideo</b> . in <i>rw</i> "lion" (p. 11) <b>Phon</b> . <i>rw</i>
E34	S	hare	Phon. wn

# **Section F. Parts of Mammals**

		Sec	ction F. Farts of Mainmais
F4	<u>\$</u>	forepart of lion	<b>Ideo</b> . in 3t "front" (p. 85 [61])
F5	景	head of bubalis	Unknown function in d3 "fat" (p. 113)
F12	7	head, neck of canine	Phon. wsr
F13	$\bigvee$	horns	Phon. wp
F18		tusk of elephant	Phon. b
F20	7	tongue of ox	<b>Ideo</b> . (playfully) in <i>mr</i> "director, chief" (p. 168) <b>Phon</b> . <i>ns</i> <b>Det</b> . taste
F21	D	ear of ox	Phon. <i>sm</i> Det. ear; hearing
F22	<u>M</u>	hind-quarters of large feline	<b>Ideo</b> . in <i>pwy</i> "back, end" (p. 85 [62])
F26	KTK	skin of a goat	Phon. n
F27	P	cow's skin	Det. skin; mammal
F29	\$	cow's skin pierced by arrow	Phon. st
F30		water-skin	Phon. šd
F31	*	three fox-skins tied together	Phon. ms
F32	<b>⊕</b> <○	animal's belly with teats and tail	<b>Ideo</b> . in <i>t</i> "belly" (p. 83 [22]) <b>Phon</b> .

F34	♡	heart	<b>Ideo</b> . in <i>jb</i> "heart" (p. 11) <b>Det</b> . heart
F35	† 8	heart and windpipe	Phon. nfr
F36	$^{\bigoplus}_{\Lambda}$	lung and windpipe	See p. 63
F38	444	backbone and ribs	See p. 63
F40	A	portion of backbone	<b>Phon</b> . 3w
F46		intestine	Phon. pr Det. turn; inside
F51	0	piece of flesh or meat	<ul> <li>Det. limb; flesh; meat</li> <li>Det. "transferred" (see p. 735) from <i>jwf</i> "meat" to <i>jw.f</i>, particle plus suffix pronoun (p. 240)</li> <li>For unknown reason used in <i>Wsjr</i> "Osiris" (p. 299 [24])</li> </ul>

# Section G. Birds

G1		vulture	<b>Phon</b> . 3
G4	A	buzzard	Phon. tyw
G5	E.	falcon	<b>Ideo</b> . in <i>r</i> "Horus" (p. 92)
G7	A.	Horus falcon on standard	Det. god; king
G14	And	vulture	Phon. mt
G17	Ü.	owl	Phon. m
G21	À	guinea-fowl	Phon. n
G28	~ <u>~</u>	black ibis	Phon. gm
G29	~ <u>~</u>	jabiru	<b>Phon</b> . <i>b3</i>
G35	Z.	cormorant	<b>Phon</b> . 3q
G36		swallow	Phon. wr
G37	A.	sparrow	Det. bad; small; weak

G38		goose	<b>Det</b> . bird <b>Ideo</b> . "transferred" (see p. 735)from <i>gb</i> "goose" to <i>Gb</i> (the god)(p. 318 [8])
G39		duck	<b>Phon</b> . <i>s3</i> <b>Det</b> . bird
G40	X.	duck landing	<b>Phon</b> . <i>p3</i>
G41	X	duck alighting	Often accompanies T14 for an unknown reason Can be used as G40
G43	Ž.	quail chick	Phon. w
G47	K	duckling	<b>Phon</b> . <i>3</i>

# Section H. Parts of Birds

H6  $\int$ ,  $\oint$  feather **Phon**.  $\check{s}w$ 

## Section I. Amphibious Animals, Reptiles, Etc.

		Section 1. A	imphiblous Animais, Reptiles, Etc.
11	35	lizard	<b>Phon</b> . <i>cš</i> 3
13	550	crocodile	Det. crocodile
15	E-30	crocodile, tail curved	Det. gather
17	20	frog	Det. frog
16		piece of crocodile-skin with spines	Phon. km
19	~	horned viper	Phon. f  Det.? in jt "father"
110	2	cobra	Phon.
112		cobra	Det. goddess
114	W.	snake	Det. snake
115	M	alternative to I14	<b>Ideo</b> . in <i>f3w</i> "snake" (p. 233)

### Section K. Fishes and Parts of Fishes

K1 a kind of fish Phon. jn

K2 a kind of fish Phon. bw

K4 oxyrhynchus Phon. 3

fish

### **Section L. Invertebrata and Lesser Animals**

L1 dung-beetle **Phon**. pr

clump of

papyrus

flowering reed

M17 and D54

M16

M17

M18

L2 bee **Ideo**. in *bjt* "bee" (p. 112)

### **Section M. Trees and Plants**

M1tree Det. tree **Ideo**. "transferred" (see p. 735) from j3m (name of a tree) to j3mt "charm" (p. 297 [1]) M2herb Phon. n **M**3 branch Phon. t Det. wood M4notched **Ideo**. in *rnpt* "year" (p. 86 [68]) palm-branch M6 M4 and D21 Phon. tr M8 pool, lotus Phon. š3 flowers M12 **Phon**. *3* lotus Phon. w3 M13 papyrus

**Phon**. *3* 

Phon. *j* 

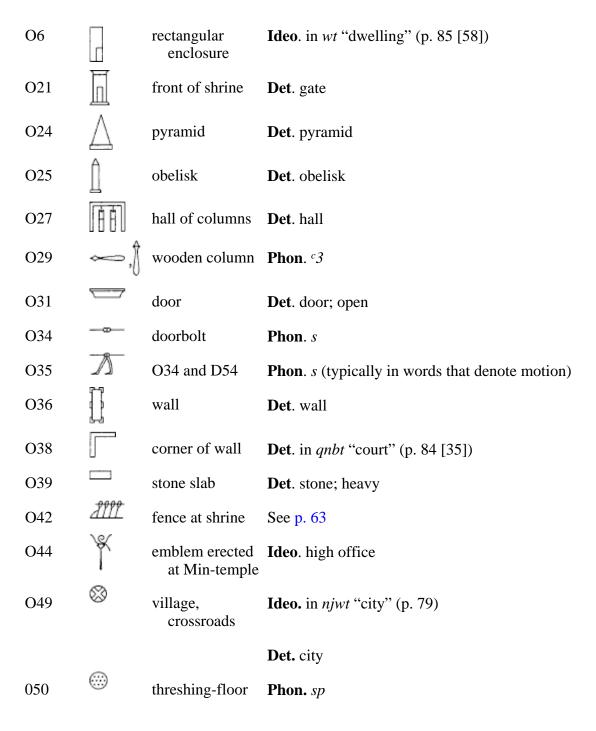
See p. 52

field of reeds **Ideo**. in sty "peasant," that is, "he of the field" (p. 173 [34]) M20 M22(x2) Phon. nn two rushes M23 a plant Phon. sw M26 a plant **Ideo**. in *šm^c* "upper Egyptian grain" (p. 300 [26]) M29 pod from sweet **Ideo**. in *nm* "sweet" (p. 103 [95]) plant or tree M36 bundle of flax Phon. r bundle of reeds M40 Phon. js M42 flower? Phon. wn M43 vine on props **Det**. vine; fruit Det. sharp M44thorn

## Section N. Sky, Earth, Water

N1		sky	<b>Det</b> . sky; upper
N2		sky with sign suspended from it	Det. night
N3		alternative to N2	Used as N2
N5	0	sun	<b>Ideo</b> . in <i>r</i> ^c "sun, day" (p. 134)
			Det. sun; light; time
N11		crescent moon	<b>Ideo</b> . in 3bd "month" (p. 86 [69])
N14	$\star$	star	<b>Ideo</b> . in <i>sb3</i> "star" (p. 77)
			<b>Phon</b> . <i>sb3</i> ; <i>dw3</i>
			Det. star; time
N16	=	N17 grains (see with three ins of sand N17)	<b>Ideo</b> . in t3 "land" (p. 85 [48]) <b>Det</b> . "transferred" (see p. 735) from t "estate" to t "eternity"
N17		alternative to N16	Used as N16 ( )

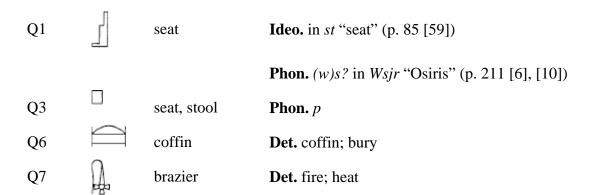
N18		sandy tract	<b>Ideo</b> . in <i>jw</i> "island" (p. 85 [56]) See also the sign following X4
N23	$\overline{Z}$	1rrigation canal	Det. irrigated land; place
N24	<del>      </del>	land, irrigation tunnels	<b>Ideo</b> . in <i>sp3t</i> "nome" (p. 286)
N25	$\sim$	hill-country	<b>Ideo</b> . in 3st "desert" (p. 85 [50])
			Det. desert; foreign land
N26	$\subseteq$	mountain	<b>Ideo</b> . in w "mountain" (p. 173 [35])
			<b>Phon</b> . $w/dw$
N27	0	sun rising over mountain	<b>Ideo</b> . in 3t "horizon" (p. 85 [49])
N28		hill, rising sun	<b>Phon</b> . <i>3</i>
N29	$\triangle$	hill	Phon. q
N31	127	road bordered by shrubs	<b>Ideo</b> . in <i>w3t</i> "road" (p. 76) <b>Det</b> . road; place
N33	0	grain or sand often tripled (	Det. metal; mineral; medicine
N34	D	ingot of metal	Det. copper; bronze
N35	·····	ripple of water	Phon. n
	······	N35 x 3	Phon. mw Det. water; liquid
N36	<u> </u>	canal, channel	Det. river; lake; sea
N37		pool	Phon. š
N40		N37 and D54	See p. 52
N41	$\Box$	well full of water	Phon. m
		Section O.	Buildings, Parts of Buildings, Etc.
O1		house	<b>Ideo</b> . in <i>pr</i> "house" (p. 9)
			<b>Det</b> . building (also in "horizon")
O4		courtyard, shelter	Phon. h



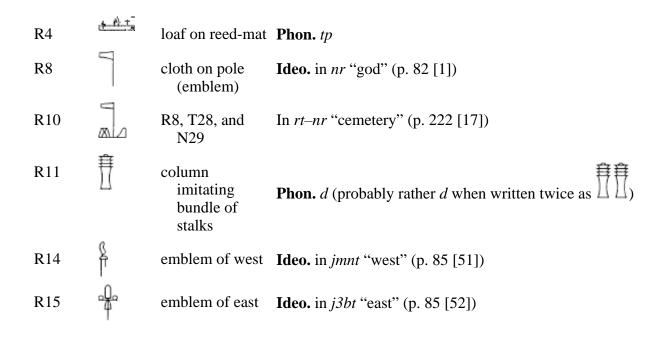
## Section P. Ships and Parts of Ships

P1	4	ship	<b>Det.</b> ship
P1A	ASA.	ship upside down	Det. upside down
P5	T	sail	<b>Ideo.</b> in <i>nfw</i> "skipper" (p. 280)
			<b>Det.</b> wind
P6	Ħ	mast	Phon. cc

## **Section Q. Domestic and Funerary Furniture**



### Section R. Temple Furniture and Sacred Emblems

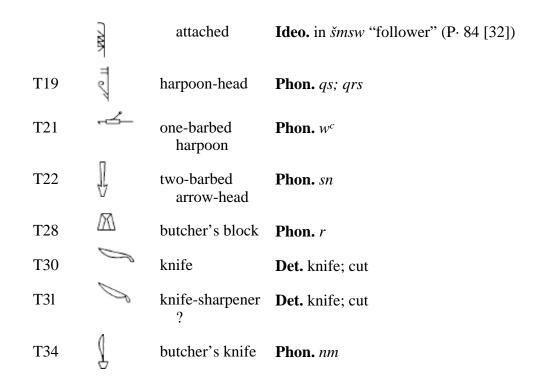


### Section S. Crowns, Dress, Staves, Etc.

S12	كسسرا	collar of beads	<b>Ideo.</b> in <i>nbw</i> "gold" (p. 87 [77])
			<b>Det.</b> precious metal
S14		S12 and T3	<b>Ideo.</b> in "silver" (p. 281)
S20	$\mathcal{Q}$	seal on necklace	Det. seal
S24		girdle knot	Phon. s
S28	T	cloth with fringe	Det. cloth
S29		folded cloth	<b>Phon.</b> s
S32		piece of cloth	Phon. sj3
S33	$\Re$	sandal	<b>Ideo.</b> in <i>bt</i> "sandal" (p. 79) <b>Det</b> . sandal; footwear
S34	7	?	Phon. ^c n
S38	1	crook	<b>Phon.</b> <i>q3</i>
S40	1	scepter	<b>Phon.</b> <i>w3s</i>
			Also used instead of S41(3m)
S41	1	scepter	<b>Phon.</b> 3 <i>m</i>
S43		walking-stick	<b>Phon.</b> <i>md</i> ( <i>w</i> )

# Section T. Warfare, Hunting, Butchery

Т3	Î, Î	mace	<b>Phon.</b> / <i>d</i>
T11	•—	arrow	Det. arrow
T12	80	bow-string	Phon. rd
			<b>Ideo.</b> "transferred" (see p. 735) from 3r "restrain (by strings?)" to <i>m3jr</i> "miserable" (p. 62)
T14		throw-stick	<b>Det.</b> throw; foreign ( 'short for 'sm' 'Asiatic'')
T18		crook, package	



# Section U. Agriculture, Crafts, and Professions

U1	5	sickle	<b>Phon.</b> <i>m3</i>
U6	1	hoe	Phon. mr
U7	K	alternative to U6	Used as U6
U10	Ü	corn-measure, grain issuing	<b>Ideo.</b> in <i>jt</i> "barley" (p. 87 [81]) <b>Det.</b> grain
U15	ALL	sledge	Phon. tm
U19	~	adze	
			<b>Phon.</b> $nw$ when combined with W24 in $\bigcirc$ $nw$
U20		alternative to U19	Used as U19
U21	Z~	adze U19 on N26	Phon. stp
U22	Ş	chisel	<b>Ideo.</b> "transferred" (see p. 735) from <i>mn</i> "chisel" to <i>mn</i> "efficient" (p. 173 [31])
U23	Ϋ́ Ω	chisel	<b>Phon.</b> mr; 3b
U28	$\underline{}$	fire- drill	<b>Phon.</b> 3

U30 potter's kiln Phon. 
$$t3$$

U32 pestle and mortar Det. pound (hence in  $m3t$  "salt" [p. 189] as thing pounded?)

U33 pestle Phon.  $tj$ 

U36 club fullers use Phon.  $m$ 

U38  $\Delta \Delta \Delta$  scale Det. scale

# Section V. Rope, Fiber, Baskets, Bags, Etc.

		S C C C C C C C C C C C C C C C C C C C	• 110pe, 11001, 2001000, 20go, 2000
V1	9	coil of rope	<b>Phon.</b> <i>š</i> ? in "100" (p. 94) <b>Det</b> . rope; bind
V4	A	lasso	<b>Phon.</b> <i>w3</i>
V6	X	cord	Phon. šs
V7	X	cord	Phon. šn
V9	Ω	rope that encircles	See p. 63
V12	2	band of string	Det. bind; anything bound
V13	<del></del>	tethering rope	Phon.
V15	$\mathbb{T}$	V13 and D54	See p. 52
V16	<del>-8888-</del>	looped cord	<b>Phon.</b> <i>s3</i>
V17	X	herdman's shelter	<b>Phon.</b> <i>s3</i>
V22	The same of the sa	whip	Phon. m
V23	=	alternative to V22	Used as V22
V24	þ	cord wound on stick	<b>Phon.</b> w / wd
V25	Å	alternative to V24	Used as V24
V26	$\sim$	netting needle	<b>Phon.</b> c / cd
V28	8	wick of flax	Phon.

V29	<b>X</b>	swab	<b>Phon.</b> <i>sk</i> ; <i>w</i> 3
V30	$\bigcup$	basket	Phon. nb
V31	$\bigcirc$	basket with handle	Phon. k
V33	B	bag of linen	<b>Det.</b> perfume (which is kept in bags of linen); smell
		Section W.	Vessels of Stone and Earthenware
W1	Ĭ	sealed oil-jar	Det. oil; unguent
W3		basin of alabaster	Det. feast
W7	$\bigcirc$	granite bowl	Det. granite
W10	$\Box$	cup	Phon. ws
W11		jarstand	Phon. g
W14	Ž	tall water-pot	Phon. s
W15		W15 with water issuing	Det. cool; fresh
W17		water-pots in rack	Phon. nt
W19	<b>Q</b>	milk-jug in net	Phon. mj
W20	₹	milk-jug	Det. milk
W21	₩	twin wine-jars	Det. wine
W22	ð	beer-jug	Det. pot; measure; drink
W24	Ō	bowl	<b>Phon</b> . <i>nw</i> ; <i>jn</i> Combined with U19 in <i>nw</i> Accompanies <i>qd</i> for no known reason
	000	thrice W24	Phon. nw
W25	Å	W24 and D54	See p. 52

# Section X. Loaves and Cakes

 $\bigcirc$ 

loaf of bread X1 Phon. t 0 X2 loaf of bread Det. bread X3 loaf of bread **Det.** bread X4 roll of bread Det. bread (N18)alternative to Used as X4 X4 X8 conical loaf? Phon. d

### Section Y. Writings, Games, Music

Y1 papyrus roll Ideo. in m3t "book" (p. 84 [40])

Det. writing; abstract notion

Y3 scribe's outfit Ideo. in s3 "scribe" (p. 84 [39])

Y5 game-board Phon. mn

### Section Z. Strokes, Signs Derived from Hieratic, Geometrical Figures

Z1stroke **Det.** with signs that at the same time (1) are ideograms and (2) refer to a word by themselves **Det.**? as ideographic stroke (p. 12 top) Space-filler Z2three strokes **Det.** plural; non-countables denoting a plurality; many (in °§3) "much, many") Z3three strokes **Det.** plural **Z**4 two diagonal Phon. y strokes **Z**5 diagonal stroke Used as substitute for signs that are difficult to draw, for example (F3, head of hippopotamus) in 3t "moment" (p. 86 [64]), (044) in *j3wt* "office" (p. 319 [12]), and B3 in *ms*(*y*) "give birth" (p. 354) **Z**6 hieratic for A13 **Det.** death; enemy or A14 **Z**7 G43 in hieratic Phon. w

Z8 oval See p. 63

Z9 two sticks crossed

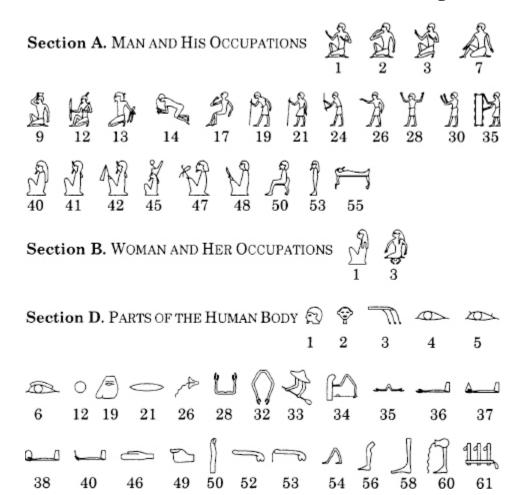
Det. actions involving something crossed or encountered two planks crossed and joined

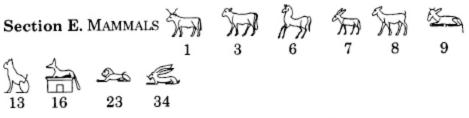
Phon.? jm
1nstead of M42 (wn) in wnm "eat" (p. 544)

# Section Aa. Unclassified

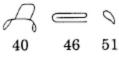
Aa1		placenta?	Phon.
Aa1		thrice Aal	Phon. w
Aa2	$\Box$	pustule?	<b>Det.</b> bodily growth or condition (especially a morbid one); smell
Aa3	$\varnothing$	Aa2, liquid issuing	Used like Aa2
Aa11		?	<b>Phon.</b> <i>m3^c</i>
Aa15		a part of the body?	<b>Ideo.</b> in gs "side" (p. 232 [1]) <b>Phon.</b> j m
Aa17	$\angle$	lid of a box?	<b>Phon.</b> <i>s3</i>
Aa18	Ó	alternative to Aa17	Used as Aa17
Aa27	rion I	?	Phon. n
Aa28	{	tool for building?	Phon. qd

# **Index to the Preceding List**





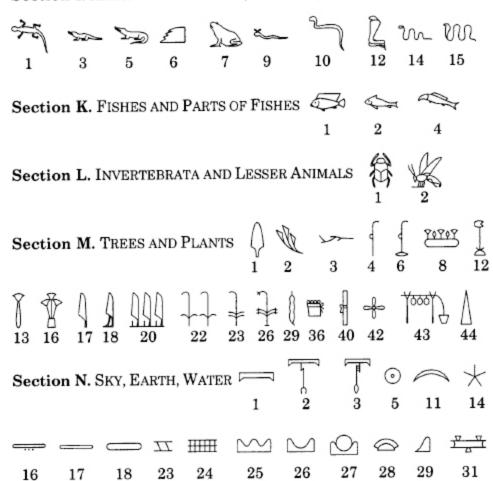
Section F. Parts of Mammals 3 4 5 12 13 18 20



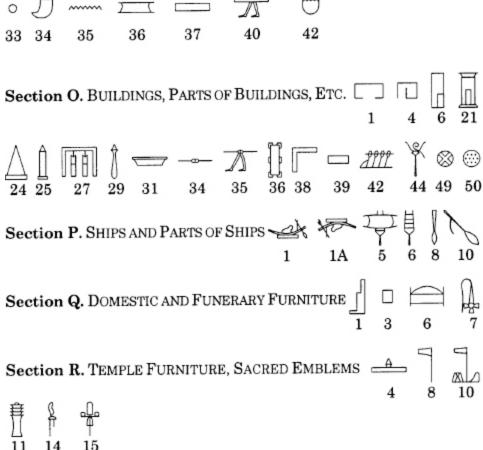
Section G. BIRDS 1 4 5 7 14 17 21 28 29 35 36 37 38 39 40 41 43 47

**Section H.** PARTS OF BIRDS  $\beta$ ,

# Section I. AMPHIBIOUS ANIMALS, REPTILES, ETC.



#### SKY, EARTH, WATER (continued)



Section S. Crowns, Dress, Staves, Etc. 

1 3 12 14

1 3 12 14

1 3 12 14

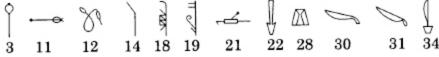
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1 3 12 14

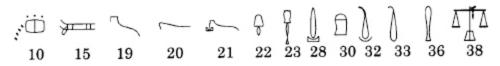
1 3 12 14

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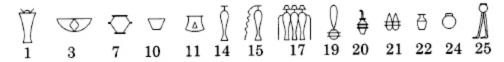


Section U. Agriculture, Crafts, and Professions  $\begin{pmatrix} & & & \\ & & & \\ & & 1 & 6 & 7 \end{pmatrix}$ 



Section V. ROPE, FIBER, BASKETS, BAGS, ETC.

## Section W. VESSELS OF STONE AND EARTHENWARE



Section Y. Writings, Games, Music  $\longrightarrow$ , 3 5

Section Z. STROKES, SIGNS DERIVED FROM HIERATIC, GEOMETRICAL

27 28

### **INDEXES**

# 1. Index of Passages Cited

## [References are to page numbers.]

Passages cited from ancient texts are identified explicitly by source in footnotes from Chapter Four onwards only. The arrangement of hieroglyphs in words may differ slightly from the original.

#### **Abbreviations**

- Abydos = É. Naville and T.E. Peet, *The Cemeteries of Abydos*, 3 vols., London 1913-14. Quoted by volume, plate, and figure of edition and by line of text.
- Adm. = Admonitions. See A.H. Gardiner, The Admonitions of an Egyptian Sage from a Hieratic Papyrus in Leiden (Pap. Leiden 344 recto), Leipzig 1909. Quoted by column and line of manuscript.
- APAW = Abhandlungen der Königlich Preussischen Akademie der Wissenschaften.
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Berl. = Berlin.

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#### Abydos

II 23 no. 5,5: 298 no. 14.

Adm(onitions)

4, 14: 223 no. 19; 16,1: 318 no. 1.

**B**(ook of the) **D**(ead)

BD (chapter) 14 (edited by) Budge 1898, 38,9: 211 no. 9; BD 17 Budge 1898, 51,16-52,1: 319 no. 13; BD 17 edited by Naville II 67,89 (Cb): 316 with note 2; BD 42 Budge 1898, 113,4: 261 no. 4; BD 46 Budge 1898, 120,13: 400 with note 1; BD 47 Budge 1898, 121,6-7: 299 no. 23; BD 51 Budge 1898, 123,5: 399 with note 2; BD 122 Budge 1898, 241,18: 239 with note 4; BD 122 Budge 1898, 241,18-19: 238 with note 2, 239 with note 6; BD 125 Budge 1898, 262,16: 239 with note 5; BD 125 Budge 1898, 263,1: 236 with note 1

**Berl**(in) Ä(gyptische) **I**(nschriften) (Berlin stela 1157)

I 258,3 (Berl. 1157,13): 212 no. 11; I 258,8 (Berl. 1157,18): 211 no. 7, 302 with note 1.

#### **Berl**(in) 3038

15,11: 316 with note 3.

#### (El) **Bersh**(eh)

I 14,1: 216 with note 2.

#### **B**(eni) **H**(asan)

I 7, right-hand vertical column, line 3: 262 no. 11, 306-7 with note 1 on 307; I 8, A,2: 297 no. 1; I 8, A,6: 254 with note 3; I 25, 75-76: 316 with note 4; I 26,155: 254 with note 4.

#### **B**(ritish) **M**(useum) 1628

(HTBM V, plate 1) 10-11: 273 with note 1; 11: 268 with note 1.

## Chap(el of) Ses(ostris)

26,29: 233 no. 12; 32,12: 283 with note 1.

#### C(offin) T(exts)

I 55b: 318 no. 9; I 173i: 212 no. 17; I 178d: 220 with note 1, 223 no. 20; I 227c: 245 with note 1; I 242d: 262 no. 10; I 248d: 318 no. 8; I 254f: 298 no. 16; I 279b T2C: 269 with note 3; I 3llg: 221 no. 3; II 3d: 212 no. 15; II 112e SIC: 442; II 166d: 213 no. 26; II 215d-216a: 314 with note 1; II 294b: 297 no. 2; II 377c: 233 no. 13; II 383c: 237 with note 1; III 47a B3C: 399 with note 1; III 47e: 202 with note 2; III 59b: 239 with note 1; III 89e (version of B3Bo): 289 with note 1; III 89e-f (version of B1L): 299 no. 24; III 95g: 239 with note 3; III 26ld: 212 no. 14; III 367c B3C: 278 with note 2; III 39Oe: 286 with note 2; IV 37f: 211 no. 10; IV 117e: 221 no. 5; IV 208b T1Cb: 315 with note 3; IV 209b BHIBr: 315 with note 4; IV 228/29c-230/ 231a: 247 no. 6; IV 286a SqlC: 238 with note 1; IV 287b: 319 no. 11; IV 33Oe: 228 with note 1; V 30b-c: 262 no. 8; V 68j: 239 with note 4; V 12le M5C: 239 with note 2; V 279c B2Be: 278 with note 1; V 387d: 232 no. 10; VI 155b-g B2Bo and B1Bo: 299-300 no. 25; VI 179g: 202 with note 1; VI 204b: 283 with note 2; VI 212b: 240 with note 1; VI 235a B1L: 263 no. 15; VI 240f: 277 with note 1; VI 25Og: lxi; VI 332k-1: 262 no. 6; VI 332m-n: 262 no. 7; VI 3381: 261 no. 1; VI 354q: 188 with note 4; VI 369p: 298 no. 19; VI 370d: 298 no. 18; VII 49m: 287 with note 4, 297 no. 7; VII 17le: 212 no. 22; VII 282b: 213 no. 27; VII 308a: 212 no. 23; VII 457k: 247 no. 4.

#### **D**(eir el) **B**(ahri)

IV 109: 297 no. 3.

#### Deir el Gebrâwi

II 4 (caption): 244 with note 2.

## E(del) A(ltägyptische)

**G**(rammatik)

§ 195: 282 with note 2.

#### (Papyrus) **Eb**(ers)

1,7-8: 284 with note 1; 69,3: 254 with note 1, 263 no. 14; 99,17-18: 315 with note 1; 101,15: 253 with note 1, 261 no. 3, 308 with note 3; 110,5: 401 with note 1, 408 with note 1.

## **E**(loquent) **P**(easant)

Bl,3: 221 no. 1; Bl,5: 300 no. 26; Bl,62: 211 no. 4; Bl,95: 244 with note 1, 247 no. 1; Bl,103-4: 281 with note 1; Bl,177: 303 with note 1; Bl,267: 211 no. 5; Bl,27O: 314 with note 2; Bl,292: 298 no. 20; B2,100: 290 with note 1, 309 with note 2; B2,101:

310 with note 1; R1: 189 with note 1; R39: 211 no. 8; R42: 267 with note 1; R45: 216 with note 1, 262 no. 5.

## **Gardiner E**(gyptian)

**G**(rammar)

100,6: 191 with note 1.

#### Gîza

III 143: 275 with note 2.

## Harhotep

562 (Maspero, *Trois années*, p. 171, has the text writing — ... II t3): 297 no. 8.

#### **Heq**(anakhte)

5,1: 241 with note 1.

## **J**(ournal of) **E**(gyptian) **A**(rchaeology)

20, 158 (Louvre E6I34,8): 222 no. 16, 222 no. 17; 20, 158 (Louvre E6I34, 19): 232 no. 3; 56, plate 46,2: 244 with note 1.

## Kah(un)

3,33: 222 no. 8.

#### **Leb**(ensmüde)

20: 243 with note 1; 38: 188 with note 5; 121: 291 with note 2; 122: 253 with note 2, 308 with note 1; 130: 298 no. 21; 132-33: 227 with note 2.

#### **Les**(estücke)

79,23: 222 no. 14; 80,22: 211 no. 1; 81,4: 222 no. 12; 81,6-7: 222 no. 13; 82,6: 211 no. 2; 94,10-11: 211 no. 3.

## Louvre (stela) C1

(line) 3: 297 no. 4.

#### Merikare Len(ingrad)

9,5-6: 212 no. 16; 10,11: 319 no. 12.

#### **Mutter und Kind**

2,8: 247 no. 2; verso 2,3: 252 with note 1, 262 no. 9, 308 with note 2; verso 4,7: 192 with note 1, 213 no. 24.

#### Newberry, Life of Rekhmara

7,17 (see Gardiner EG 107): 280 with note 2.

#### (Sethe) **Nominalsatz**

60: 221 no. 6.

#### Pah(eri)

III: 216 with notes 3, 4.

## **P**(ersonen)**N**(amen)

I 13,25: 298 no. 15; I 14,7: 298 no. 17; I 14,11: 318 no. 5; I 14,13: 298 no. 13; I 14,15: 298 no. 12; I 15,4: 289 with note 4; I 15,7: 289 with note 3, 297 no. 11; I 170,26: 272 with note 1; I 171,11: 275 with note 3; I 172,10: 286 with note 3, 297 no. 5; I 172,14: 270 with note 2; I 172,22: 287 with note 1; I 181,5: 270 with note 3; I 181,17: 272 with note 1; I 204,25: 291 with note 5; I 206,17: 282 with note 3; I 214,7: 282 with note 1, 287 with note 3; I 214,8: 297 no. 6; I 223,11: 275 with note 1; II 299,26: 291 with note 4.

## P(yramid) T(exts)

341c: 190 with note 1, 212 no. 21; 647b: 270 with note 1; 1450a: 221 no. 4; 1482a: 269 with note 2; 1802a: 221 no. 2; 2033: 287 with note 4.

## **Ptahh**(otep)

213: 251 with note 2.

#### **Ram**(esseum Papyri)

IX 2,9-10: 211 no. 5; IX 3,6: 232 no. 8; X 1,2: 213 no. 25; C verso 11,10 (plate 30): 291 with note 3.

#### Reden

17, 23, 24: 212 no. 12.

#### (Papyrus) **Rhind**

49: 271 with note 1; 60: 212 no. 18.

#### **Rougé Inscr**(iptions) **hiér**(oglyphiques)

218,39: 221 no. 6.

## **R**(ecueil de) **T**(ravaux)

39, 121: 212 no. 19.

## **Sh**(ipwrecked) **S**(ailor)

12-13: 222 no. 15; 42: 318 no. 7; 50-51: 232 no. 6; 62-63: 286 with note 1; 63-64: 222 no. 10; 67-68: 233 no. 11; 100-101: 262 no. 12, 309 with note 1; 108: 232 no. 1; 131: 261 no. 2; 134: 222 no. 11; 136-37: 408 with note 1; 150: 246 with note 1.

#### Sin(uhe)

B23: 190 with note 2, 195 with note 1, 212 no. 20; B68: 304 with note 1; B81: 316 with note 1, 319 no. 10; B81-82: 232 no. 7, 307 with note 2; B84-85: 291 with note 1; B155: 214 with notes 1 and 2; B222: 287 with note 2; B222-23: 297 no. 10; B230: 251 with note 1; B252-53: 408 with note 1; B263: 232 no. 2, 277 with note 2, 297 no. 9; B267: 242 with note 1, 247 no. 5; B267-68: 212 no. 13, 227 with note 3; B280: 304 with note 2; B280-81: 318 no. 4; R2: 188 with note 2; R8: 232 no. 9; R55: 215 with note 1.

## Siut

I 269: 232 no. 5; I 272: 232 no. 4; I 288: 227 with note 1.

## (Papyrus) **Sm**(ith)

7,8: 298 no. 22; 14,21: 315 with note 2.

## **Urk**(unden)

I 225,16: 269 with note 4; IV 17,11: 188 with note 3; IV 17,16: 303 with note 3; IV 96,6-7: 281 with note 2; IV 561,2: 289 with note 2; IV 618,15: 222 no. 9; IV 693,8: 221 no. 7; IV 948,12: 319 no. 14; IV 973,11: 254 no. 2; IV 1087,9: 222 no. 18; IV 1090,3: 318 no. 6; V 10,3 (cf. Naville II 32,4 [Ta]): 245 with note 2, 247 no. 3; V 30,8-9: 247 no. 6; VII 16,7: 262 no. 13; VII 49,14: 303 with note 2, 318 no. 2; VII 54,4: 318 no. 3.

#### Westc(ar)

6,26: 230 with note 1; 7,1: 188 with note 1; 9,8-9: 239 with note 6; 9,11-12: 280 with note 1; 9,15: 240 with note 2.

## **Z**(eitschrift für) Ä(gyptische) **S**(prache)

64, 98, pl. III, 4, l: 272 with note 2; 83, 11: 269 with note1.

# 2. Index of Subjects

## [References are to page numbers.]

```
Abbreviated writings, 57–58
Absence, of a component and as a component, 512–15
Absence of inflection, as one of three types of inflection in either of the two possible locations of inflection,
   392–94, 397, 398, 399, 400, 401, 402
Absolute existence ("something exists"), as opposed to relative existence ("there is something"), 230
Absolute tense, 547–48
Active voice
—association of the stative with the, 530–33
—association of verb forms of intransitive verbs with the, 530
—secondary association of the stative of intransitive verbs with the, 532–33
Adjectival
—as bridge notion between sentence type and verb form, xxxix, liv-lv
—central place of the notion of, in the Standard theory, xxxvii
—sharing reference to an entity with what is substantival, as opposed to the lack of such a reference in what is
   adverbial, lxvi-lxvii, 73
—two meanings of, depending on what it is combined with, 185–86
Adjectival clause, 67
—place in this grammar's organization, lxxvi–lxxx
Adjectival phrase, 67, 112–14
—place in this grammar's organization, lxxvi–lxxx
Adjectival sentence, 67, 214–20
—beginning with m (that is, presumably the prepositional adjective n(y)), in order to express possessive
   relationships, 274–87
—concept and sound pattern, xlv
—negation, 251–52
—place in this grammar's organization, lxxv
Adjectival verb form
—place in this grammar's organization, lxxvi-lxxx
Adjective, xxxvii, 98–100
—and what is Adjectival, lxxvii
—as one of nine word types distinguished in this grammar, 71–72
—denoting two things (like all that is adjectival), as opposed to the substantive which denotes one thing,
   lxvi–lxvii
—denoting a pure state, as opposed to the stative, which not only denotes a state but also implies the process
   that produced the state, 332–33
—in sentence and in phrase, 217–19
—in the adjectival sentence, 214–20
—place in this grammar's organization, lxxvi-lxxx
—referring to a property only, 99
—sharing inflection with verbs as distinct from substantives, 369
—undeclined, as member of the adjectival sentence type, xlv
—used dependently, 100
Adjective verb
—as a type of intransitive verb, 359
—denoting change like all verbs, 331
Adverb, xxxv, 147–48
—accompanying adjectives in adjectival sentences, 216
—and what is adverbial, lxxiv
```

```
—as one of nine word types distinguished in this grammar, 71–72
—place in this grammar's organization, lxxvi-lxxx
Adverbial
—as bridge notion between sentence type and verb form, xxxviii, liv-lv
—central position of the notion of, in the Standard theory, xxxvii
—two meanings of, depending on what it is combined with, 185–86
Adverbial clause, 67
—marked by absence of a pause, lxvii–lxviii
—of the "virtual" kind, xxxix-xxxx
—place in this grammar's organization, lxxvi-lxxx
Adverbial phrase, 67, 148–52
—place in this grammar's organization, lxxvi-lxxx
Adverbial sentence, 67, 224–29
—denoting a transient association between entities, 301–4
—expressing possessive relationships, 287–90
—in complementary distribution with the existential sentence, 305–10
—negation, 252–53
—place in this grammar's organization, lxxvi-lxxx
Adverbial verb form, place in this grammar's organization, lxxvi-lxxx
Afroasiatic, as a large group of languages encompassing Egyptian, 1
Agnosticism, as an attitude towards the study of the Middle Egyptian verbal system, 474–75
Akkadian, as a Semitic language related to Egyptian, 1
"All," 108–10
"Alphabet," as the set of all the uniliteral phonograms, 17–20, 24
"And," 114-15
Apodosis, as what follows from a condition or protasis (as opposed to a consequence, which follows from a
   premise), lxxiii-lxxiv
Apposition. See Appositional phrase
Appositional phrase, 93–94
—in the substantival sentence, 208–9
Arabic
—as a Semitic language related to Egyptian, 1
—as the language of modern Egypt, 1, 4
Aristotelian logic, xlviii, 1, lxviii
Arrangement, as a substitute for what is not written out in verb forms (when diagnosing verb forms), lxiv-lxv
Aspect, 545–46
—as a grammatical term avoided in this grammar, lxxv
Auxiliary
—as one of seven types of components in Dimension 4 of the verbal system, 460–67
—containing another auxiliary, 466
—containing another component, 465
—definition, 460
—elements associated with the, 466–67
—non–verbal, 462–63
—separability from the stem, 460
—verbal, 461–62, 465
"Beautiful of face" phrase, 113-14
Berber, as a language group related to Egyptian, 1
Biliteral phonogram, 13, 14, 15, 24, 29-35
—complemented by uniliteral phonograms, 41–42
Biliteral strong verb, as a sound pattern class in Dimension 1 of the verbal system, 352
Boole, George, on the difference between the substantive and the adjective, lxv
Boolean logic, lii, lxxiii-lxxv
Causative verb, as a sound pattern class with initial s in the sound pattern and causativity as a component of
   the concept, 353–54
Chadic, as a language group related to Egyptian, 1
```

```
Champollion, Jean-François, decipherer of hieroglyphic writing, 4
Change, as the general concept denoted by the verb, 72, 331
Circumstance, as the concept denoted by the adverb and all that is adverbial, 72, 147, 554
"Circumstance word," as suggested equivalent for the otherwise empty term "adverb," 329
Classical Egyptian, as a synonym of Middle Egyptian, 1
Clause, 555
—as one of four basic grammatical terms in this grammar (along with word, sentence, and phrase), 67 —
definition, 89-90
—place in this grammar's organization, lxxvi-lxxx
Cleft sentence, as empirical marker of isolating contrast, lii–liii, lvii
Comment, as a grammatical term avoided in this grammar, xlvii-li
Comparative degree ("better," "bigger"), lack of expression of, in the Middle Egyptian adjective, 219–20
Complementary distribution, 264–310
—of adverbial and existential sentences, in order to associate a circumstance and an entity with one another,
   305-10
—of substantival, Adjectival, adverbial, and existential sentences, in order to express possessive relationships,
   265-94
—of substantival and Adjectival sentences, 215
—of substantival and adverbial sentences, in order to associate two entities with one another, 301–4
Complete thought
—general concept denoted by the sentence, 181
—place in this grammar's organization, lxxvi-lxxx
Components (Dimension 4 of the verbal system), 336, 423–517
—abundance or shortage of, in diagnosing verb forms, 480–82
—combinations of, 494–97
—double appearance in the auxiliary and the main constituent of a compound verb form, 469
—encompassing other components, 487
—organization of, 486–97
—position of, in relation to the stem, 492–93
—relation of, to the other seven dimensions of the verbal system, 430–34
—unobservable in writing (though presumably observable in speech), 435–37
—ways of counting, 488–91
Compound preposition, 151–52
Compound verb form (verb form containing an auxiliary), 463–64
Concept, as one side of language whose links to the other side, sound pattern, make language what it is, and
   therefore in a sense one half of this grammar, xxxix, xlii-xliv, and throughout
—difficulty of defining (as opposed to sound patterns), 520
Concept class of the root (Dimension 2 of the verbal system), 336, 355-62
—lack of overlap with sound pattern classes, 356
Condition, as distinct from premise, lxxiii-lxxv
Conjugation
—as a type of inflection (exhibiting person), 374–75
—as one of two types of strings of inflectional endings, 374–75
—the three types of, as distinguished by sound pattern and not by concept, 375
Conjugation by dependent pronouns
—as a type of single inflection, 401, 404–5, 406–8
—as one of three types of conjugation, 375, 381–83
Consequence, what follows from a premise, as opposed to an apodosis, which follows from a condition or
   protasis, lxxiii-lxxv
Consonant, 17, 53, 54
—number of, found in a word, 68–70
Context, as a diagnostic tool in identifying isolating contrast, 197
Contiguity
—as a pivotal concept in this grammar, Appendix VI
—as the explanation of instances in which the stative exceptionally does not refer to a state, lxviii–lxx
Contingency, as dependency on a condition (not on a premise), lxxiii-lxxv
```

```
Contingent tense, 548–49
—in light of the distinction between condition and premise, lxxiii-lxxv
Contingent verb form. See Contingent tense
Coordinates of the verb, lxiii, 331–563
—as an organizational guide in evaluating incomplete writings of verb forms, lxiii
—choosing of, 345–46
—definition and purpose, 333–35
—place in this grammar's organization, lxxvi-lxx
—primary, intermediate, and final, 338
Coptic, as a stage of the Egyptian language, 1, 2, 4
Core vocabulary
—adjectives, 103
—adverbs, 152
—prepositions, 153
—substantives, 82–87
Countable—as a type of substantive, 80
—denoted in English by "many" (as opposed to "much" which denotes non-countables), 104
Cushitic, as a language group related to Egyptian, 1
Declension
—as a type of inflection lacking person, 374–75
—as one of two types of strings of inflectional endings, 374
—the two types of, as distinguished by sound pattern and not by concept, 375
Declension by Adjectival endings
—as a type of single inflection, 402
—as one of two types of declension, 375, 383
Declension by third person suffix pronouns
—as a type of single inflection, 402
—as one of two types of declension, 375, 384–85
Definite, 305–10
Definite article, lack of a, in Middle Egyptian, 74
Demonstrative pronoun, 142–45
—unusual use of the plural of the, 269
Demonstrative. See Demonstrative pronoun
Demotic
—as a hieroglyphic script, 2–3
—as a stage of the Egyptian language, 1
Dependent clause, 555
Dependent personal pronoun, 127, 135–39
—following adjectives ("I"), 138
—following particles ("I"), 137–38
—following verbs ("me"), 136
—in the adjectival sentence, 215
—sound patterns of the, 135–36
—use after the negation — nn, 253
—use of the, in the adverbial sentence, 225–26
Dependent pronoun. See Dependent personal pronoun
Dependent verb form, 554, 555
Determinative, 27, 45–48, 49–50, 51, 53, 54
—sometimes difficult to distinguish from the ideogram, 61–62
Dimensions of the verbal system (eight in number)
—pertaining to concept and not to sound pattern (invisible dimensions), 432–34
—principal distinctions among the, 336–38
—relations between the, 339–40
—relations of the, to one another, 430–32
Direct genitive, 114
```

```
—as one of two types of genitive phrase ("of"), 92–94
—in compound prepositions, 151–52
—in possessive relationships, 267
Direct inflection, as one of two locations of inflectional endings, namely attached to the stem, 390–91
Direct inflection only, as one of two types of inflection found in verb forms as a whole, 395–96
Discussive tense, 551–52
Distinctive contrast, as an empirical phenomenon, li–liv
Double inflection
—always consisting of declension by Adjectival endings followed by suffix conjugation, 394–95
—compared to parallel inflection, 394–95
—as one of three types of inflection in either of the two possible locations of inflection, 392–94, 397, 398, 409
Doubling of ideogram, phonogram, or determinative, as a marker of the dual, 77
Drawing hieroglyphs, 21–22
Dual, 74, 78-79
Ejective sound, 20
Elliptical sentence, as expression of a complete thought only partially uttered, 181
Emphatic nominal sentence, lv-lix
Enclitic particle, 256, 257
—as space filler, 503–4
—rules of word order regarding the, 313–14
Enclitic pronoun
—as space filler, 503–4
—rules of word order regarding the, 312–13
Enclitic word
—position in the sentence, 189–90
—rules of word order regarding, 312–16
"Entire," 170
Entity
—as part of the general concept denoted by all that is adjectival, lxvi–lxvii, 98
 -as the complete general concept denoted by the substantive and all that is substantival, lxvi-lxvii, 72, 78,
   554
—reference to one instance of the, as inflection outside the verb, 376
—reference to zero, one, or two instances of the, as the concept of inflection, 368
"Entity word," as suggested equivalent for the otherwise empty term "substantive," 329
"Every," 108-11
Existential sentence ("there is"), xxxvii, 67, 230
—expressing possessive relationships, 290–91
—in complementary distribution with the adverbial sentence, 305–10
—negation, 253–54
—place in this grammar's organization, lxxvi-lxxx
Fact, Appendix VI
—and the size of the verbal system, 341
—contrasted with inference, xlv-xlvii, 96–97, 515–17
False plural (singular substantive written as if it were a plural), 81
Far demonstrative, 142
Feminine gender in substantives, 74
Final coordinate, 338
Fourth-weak verb, as a sound pattern class in Dimension 1 of the verbal system, 354
Function (Dimension 8 of the verbal system), 336, 553–62
—definition, 553–54
—detailed example, 555–62
Gardiner, Alan Henderson, as author of the most widely used reference grammar, xxxix
Gemination
—and the principle of parallelism, 442–43
—and the verb's dictionary form, 439
—as one of seven types of components in Dimension 4 of the verbal system, 438–43
```

```
—degrees of diagnostic significance, 440
—the three types of, 440-42
—two definitions, 438–39
Gender
—as a feature of inflectional endings, 372
—as one of three parts making up the concept of personal pronouns, 126
—in combination with person and number or just number in inflectional endings, 373–74
—in substantives, 74
—specific combinations with person and number or just number in inflectional endings, 385
General Standard theory, xxxv
Generic verb form, as distinct from specific verb form, lxiii-lxiv, 340-41
Genitival phrase ("of"), 90–93
Ghali, Boutros Boutros, as a Copt, 4
Glottal stop, 18, 71
Gunn, Battiscombe (Oxford Egyptologist), on adjectives, lxvi-lxvii
Hebrew, as a Semitic language related to Egyptian, 1
Hieratic, as a hieroglyphic script, 2–3, 25
Hieroglyphic proper, as a hieroglyphic script, 2–3, 25
Hieroglyphic writing, its structure as a reflection of the profoundly dual structure of language, xlii-xliv
Ideogram, 41, 48, 45, 49–50, 51, 54
—as a hieroglyph referring to the concept of a word (and indirectly also to its concept), 8, 9, 10, 11–12
—as a logogram, 12–13
—as a meaning or concept sign that also refers to sound, xlii–xliv
—sometimes difficult to distinguish from the ideogram, 61–62
Imperative, inflection of the, 375
Indefinite, 305–10
Indefinite article, lack of the, in Middle Egyptian, 74
Indefinite pronoun, 126
Independent personal pronoun, 127
—sound patterns (forms) of the, 139–40
Independent pronoun. See Independent personal pronoun
Independent verb form, 554
—place in this grammar's organization, lxxvi-lxxx
Indirect and direct inflection combined, as one of two types of inflection found in verb forms as a whole,
   395-409
Indirect genitive
—as one of two types of genitive phrase ("of), 91–92
—use in possessive relationships, 267
Indirect inflection, as one of two locations of inflectional endings, namely attached to an auxiliary, 390–92
Inference
—as distinct from fact, xlv-xlvii, 96-97, 515-17
—as distinct from fact in relation to the size of the verbal system, 341
Infix
 -as one of seven types of components in Dimension 4 of the verbal system, 453–57
—called general (seven in number), 453–54
—called special (two in number), 453–54
—relation to what follows in verb forms, 456–57
—relation to what precedes in verb forms, 455–56
—two instances of the, combined, 457
Inflection (Dimension 3 of the verbal system), 366–414
—as a means of defining voice, 526–28
—as one of the eight dimensions of the verbal system, 336
—as substitute information for Dimension 5 to 8 of the verbal system, 483–84
—compared to suffix personal pronouns, 369–70
—survey of the coordinates in, 410–14
Inflectional ending
```

```
—as reference to an entity playing a role in the instance of change denoted by a verb form, 368–76
—number of, in direct inflection and in indirect inflection, 392
—number of, in relation to number of entities referred to, 371
Interjection, 260
—as one of nine word types distinguished in this grammar, 71–72
Intermediate coordinate, 338
Interrogative pronoun, 235–39
Intonation
—as a sound pattern denoting the concept of isolating contrast, 198, 203
—as empirical marker of isolating contrast, lxi
—as sound pattern of the concepts of isolating contrast and distinctive contrast in modern living languages,
   liii–liv
Intransitive verb
—definition, 356–57
—in English and Middle Egyptian, 358–59
—three types, 359
"Inverted" use of prepositional adjectives
—in general, 166–68
—in the case of n(y) in specific, 268–69, 276, 283, 284, 293
Isolating contrast
—as an empirical phenomenon, xlvi–xlix
—as an inferred fact in adjectival sentences expressing possession, 276, 281, 289–90
—as an inferred fact in substantival sentences, lii–lvi, 193–207
—as something added to a sentence exhibiting no isolating contrast, lvii
—detection of, as the true purpose of the question test, lx-lxiii
—difference in sound pattern with sentences that lack, lv-lix
—presenting elements as distinct from and at the exclusion of other elements, 195–97
"It," abstract and specific, 100–102
Juxtaposition, relations of, lxv, 470–72
Language, the dual structure of, xlii–xliv
Late Egyptian, as a stage of the Egyptian language, 1, 2
Lavout, 59-60
"Links," as title of Part 2 of this grammar (as distinct from "Elements," the title of Part 1), xxxv
Logogram, ideogram or phonogram referring to both sound pattern and concept of a word, 12–13, 49
Main constituent (anything but the auxiliary in verb forms with auxiliaries), 463–65
Masculine in substantives, 74
Meaning. See Concept
Meaning sign. See Ideogram
Middle Egyptian, as a stage of the Egyptian language, 1, 2, 3
Modern school pronunciation, 23–24
Monogram, as a composite of more than one hieroglyph, 51–52
Morphology, as a grammatical term avoided in this grammar, lxxvi
Motion, verb of, as a type of intransitive verb, 359
Narrative tense, 551–52
Near demonstrative, 142
Neck (ca. 1860–1924), inventor of an Eskimo hieroglyphic script, 11
Negation (Dimension 5 of the verbal system), 336, 519–24
—concept, 521
—in sentences, 249–54
—sound patterns linked to the concept of, 521
Negation verb, 522–24
—two instances of the, combined, 524
Negation word, 249–50
Negatival complement, 524
"Nisba" adjective. See Relational adjective
```

```
"No" in Middle Egyptian, 260
"Nominal," as a term encompassing the two terms "substantival" and "adjectival," 73
"Nominal verb form," as a term encompassing the two terms "substantival verb form" and "Adjectival verb
   form," 554
Non-countable, as a type of substantive, 80
Non-enclitic particle, 256
Non-verbal sentence, 181–329
—place in this grammar's organization, lxxvi-lxxx
"Noun." See also Substantive
—widely used term for which "substantive" is preferred in this grammar, 73
Number
—alone or in combination with person and gender, with just person, or with just gender in inflectional
   endings, 373–74
—as a feature of inflectional endings, 372
—as one of three parts making up the concept of personal pronouns, 126
—in substantives, 74
—specific combinations with person and gender, with just person, or with just gender in inflectional endings,
   385
Numeral, as one of nine word types distinguished in this grammar, 71–72
Old Egyptian, as a stage of the Egyptian language, 1, 2, 3
Orthography ("correct spelling"), 54–56
"Or," 115
"Other," 111-12
Paradigm, definition of the, 183–86
Paradigmatic relation, as Saussure's term for what is called here relation of substitution, lxv
Parallel inflection
—compared to double inflection, 394–95
—the two types, 395
Parallel inflectional endings (two inflectional endings in one verb form together referring to only one entity),
   371
Particle, 255-60
—as one of nine word types distinguished in this grammar, 71–72
—enclitic, 256
—in questions, 245
—meaning of, 257–59
—non-enclitic, 256
Passive voice, association of the stative conjugation with both the active voice and the, 530–33
Pause
—absence of, as an inferred marker of adverbiality, lxvii–lxviii
—presence of, as a marker of independence, lxvii-lxviii
Permanent association between entities, 301–3
Person
—as a feature of inflectional endings, 371–72
—as one of three elements making up the concept of personal pronouns, 126
—in combination with gender and number or with just number in inflectional endings, 373–74
—specific combinations with gender and number or with just number in inflectional endings, 385
Personal pronoun, 126–40
—defined as a person, gender, and number word, 126–27
—exhibiting eight combinations of person, gender, and number (excluding the dual), 128–29
—the three types of (suffix, dependent, and independent), 127–28
Phonetic complement, 41–43, 49–50
Phonogram, 41, 42, 46, 48, 49–50, 51, 52, 54
 as a hieroglyph referring to the sound pattern of a word (in some instances additionally to the word's
   concept), 8, 9, 10, 13–14
—sometimes additionally referring to a word's concept (not only to its sound pattern), namely when referring
   to a complete sound pattern, xlii–xlv
```

```
Phrase
—as one of four basic grammatical terms in this grammar (along with word, sentence, and clause), 67
—definition, 89–90
Pictogram, written sign or symbol that is also a drawing of something (in other words, any hieroglyph), 14
Place-name, masculine instances not ending in \triangle t, 75
Plural, in substantives, 74, 75–78
Plural strokes
—as a determinative marking the plural, 75
—as a determinative of non-countables, 80
Polotsky, Hans Jacob, xxxvi, xxxvii, xxxix, xl, xlix, 1
—on adjectives, lxiv
Polotskyan theory, xxxvi
Possession. See Possessive relationship
Possessive relationship, 265–94
—definition and main distinctions, 265–66
—on the level of the phrase, 267–72, 292–93
—on the level of the sentence, 272–91, 293–94
—survey of the types, 292–94
Possessor, definition and main distinctions, 265–66
Prague School of linguistics, 1
Predicate
—as a grammatical term avoided in this grammar but not in the Standard theory, xlvii–1
—as a notion lacking an empirical body, lviii
—presumably revealed by the question test, lx-lxii
—role of, in a theory on the meaning of the particle \iiint jw, lxx-Ixxii
Premise, as distinct from condition, lxxiii-lxxv
Preposition, 148–49
—as one of nine word types distinguished in this grammar, 71–72
—as one of seven types of components in Dimension 4 of the verbal system, 457
—compound, 151–52
—exhibiting a different writing when followed by a suffix pronoun, 150
Prepositional adjective (relational adjective derived from prepositions), 155–70
—concept and sound pattern of the, 155–58
—derived from compound prepositions, 169–70
—the preposition in the, 160–66
—usages, 158–59
—"inverted" use of the, 166–68
Prepositional phrase (adverbial phrase beginning with a preposition), 149–50
Preterite tense, 549–51
Primary coordinate, 338
Principle of parallelism, 342–45
—and gemination, 442–43
Principle of relative tense, 547–48
Process, as distinct from state, lxviii–lxix, 332–33
Pronoun
—as one of nine word types distinguished in this grammar, 71–72
—definition, 125–26
—place in this grammar's organization, lxxvi-lxxx
Pronunciation of Middle Egyptian
—ancient, 23–24
—used in school, 23–24
Property
—as a concept denoted by adjectives, 72
—as a concept denoted by all that is adjectival, 98, 554
"Property-and-entity word," as suggested equivalent for the otherwise empty term "adjective," 329
```

```
Protasis, as a technical term for a condition, lxxiii-lxxv
Quadriliteral verb, as a sound pattern class in Dimension 1 of the verbal system, 354
Ouestion, 234–46
—for corroboration ("yes-or-no" question), 241–45
—for specification, asking for an entity or a circumstance, 235–41
—interpreting substantival sentences as answers to a, lix
Question test, its purpose in the study of the substantival sentence, lxx-lxxii
Quinquiliteral verb, as a sound pattern class in Dimension 1 of the verbal system, 354
Rebus principle (principle according to which a hieroglyph referring to a word's concept and therefore also
   indirectly to its sound pattern can also refer just to its sound pattern), 14–15
Rebus writing. See Rebus principle
Relation. See also Arrangement
—as a key empirical substitute for unobservable components in identifying verb forms, 469–80
—as a means of defining and diagnosing verb forms, 472–73, 479, 480
—contracted by components (that is, options in Dimension 4 of the verbal system) with other elements, 470
—occurring between dimensions, 339–40
—of juxtaposition and of substitution, lxv, 470–72
—of substitution, as derived from relations of juxtaposition, 475–76
Relational adjective
—derived from substantives, 105–8
—double feminine ending in the, 108
Relative existence ("there is something"), as opposed to absolute existence ("something exists"), 230
Relative tense, 547–48
Rheme, as a grammatical term avoided in this grammar, xlvii-li
Rhetorical question, 245–46
Root, as a feature of verbs in general, regardless of verb form, 348–54
Root consonant, number found in verbs, 351
Satellite, place in this grammar's organization, lxxvi-lxxx
Saussure, Ferdinand de (Swiss linguist, founder of modern linguistics), 1
School pronunciation of Middle Egyptian, 23–24
Semitic, as a language group related to Egyptian, 1
—as one of four basic grammatical terms in this grammar (along with word, clause, and phrase), 67
 -place in this grammar's organization, lxxvi-lxxx
Sentence type, 181–82
—concept and sound pattern, 182
—core, 183
—definition in terms of the dual structure of language, xlv
—existence of more than one, as the most characteristic feature of the Egyptian language, 181
—link with verb form, as Archimedean point of Polotskyan theory, xxxix–xxxx, lxxvii
—place in this grammar's organization, lxxvi-lxxx
Sign, as the basic unit of language, namely the link between a tidbit of sound pattern and a tidbit of concept,
   xlii
Single inflection, as one of three types of inflection in either of the two possible locations of inflection, 392–94
   , 397, 398, 399, 400, 401, 402–8
Singular in substantives, 74–75
Singular substantival ending, as one of seven types of components in Dimension 4 of the verbal system, 452
Skepticism, as an attitude towards the study of the Middle Egyptian verbal system, 474
Sound, as the basic unit of the sound pattern, 17
Sound pattern
—as one side of language, whose links to the other side, concept, make language what it is, and therefore in a
   sense one half of this grammar, xxxix, xlii-xliv, li-liv, lxiv, and throughout
—clustering of tidbits of concept inside a single tidbit of, 539–41
—items of, linked to active voice and passive voice in Dimension 6, 528–29
—items of, linked to the concept of negation, 521
Sound pattern class of the root, as one of the eight dimensions (Dimension 1) of the verbal system, 336,
```

```
348-54
—lack of overlap with concept classes (Dimension 2), 356
Sound sign. See Phonogram
Space filler
—enclitic character, 502
—filling spaces in verb forms, 502–11
—separating parts of verb forms from the stem, 505–9
—shrinking and expanding of the, 509–11
Space
—as an absence, 501–2
—inside verb forms, as the location of potential disruptions of a verb form's continuity, 499–511
—locations of, 504–5
Special Standard theory, xxxvii
Specific verb form, as distinct from general verb form, lxi-lxii
Spelling variant, 55–56
Standard theory, lxvi, lxxvii, lxxix
—link between sentence type and verb form as a crucial feature of, xxxix-xxxx
—special and general, xxxvi–xxxvii State, as distinct from process, lxviii–lxix, 332–33
Stative conjugation
—as a type of single inflection, 401, 405–8
—as one of three types of conjugation, 375, 378–81
—as sole part of the verbal system expressing a state (in addition to implying the process leading to that state),
   332–33
—exceptionally not referring to a state, lxviii-lxix
—as a feature of specific verb forms, 349–51
—as substitute information about Dimensions 5 to 8 of the verbal system, 483–85
Subject
—as a grammatical term avoided in this grammar, xlvii-li
—as a grammatical term without reference to an empirical fact, lviii
—presumed revealed by the question test, lx-lxii
—role of, in a theory about the meaning of the particle | | jw, lxx-lxxii
Substantival
—as bridge notion between sentence type and verb form, xxxviii, liv-lv
—central position of, in the Standard theory, xxxvii
—sharing reference to an entity with all that is adjectival, as opposed to the lack of such a reference in all that
   is adverbial, lxiii-lxiv
—two meanings of, depending on what it is combined with, 185–86
Substantival clause, 67
—of the "virtual" kind, xxxix–xxxx
—place in this grammar's organization, lxxviii–lxxx
Substantival phrase, 67, 89–94
—place in this grammar's organization, lxxviii
Substantival sentence, xxxviii, xxxix, 67, 187–209
—absence and presence of isolating contrast in the, 193–207
—denoting a permanent association between entities, 301–3
—distinction between Patterns 1, 2, and 3 of the, 187–88
—expressing possessive relationships, 273
—in complementary distribution with the adjectival sentence 215–16
—isolating contrast in the, as an inferred fact, lv-lix
—negation, 250–51
—Pattern 3 of the, as an extension of Pattern 2, 192
—place in this grammar's organization, lxxvi-lxxx
—possibility of the existence of isolating contrast in the, lv, lvii–lix
Substantival verb form
```

```
—affinity with the substantive, 556–62
—appearing in the substantival member of an adverbial sentence, liv
—as a reference to an entity, 556–57
—as something other than a substantive, 555
—place in this grammar's organization, lxxvi-lxxx
Substantive, xxxviii, 73–87, 125
—and what is substantival, lxxvii
—as an expression along with all that is substantival of one thing, as opposed to the adjective as an expression
   of two things, lxvi–lxvii
—as one of nine word types distinguished in this grammar, 71-72
—ending in \triangle t yet masculine, 75
—not ending in \triangle yet feminine, 75
—place in this grammar's organization, lxxvi–lxxx
Substitution, relation of, lxv, 470–72
Suffix conjugation
—as a type of single inflection, 401, 403, 404–6
—as one of three types of conjugation, 375, 376–78
Suffix personal pronoun, 127–35
—alternating with the other entities as second member of the genitive phrase, 132
—attached to prepositions, 133
—attached to substantives ("my"), 131–32
—attached to verbs, 134
—compared to inflection, 369–70
—sound patterns (forms) of the, 130
—special writings of the, such as \sqrt{ky} following the dual, 134
—use of the, in possessive relationships, 267
—use of the, with the particle \sqrt{M} jw, 226
Suffix pronoun. See Suffix personal pronoun
Syntagmatic relation, as Saussure's name for relation of juxtaposition, lxii
Syntax, as a grammatical term avoided in this grammar, lxxv-lxxvii
Tense, lxxv, 542–45
 -absolute and relative, 547–48
Tesnière, Lucien (French linguist), xlviii
Theme, as a grammatical term in this grammar, xlvii-1
Third person, as a residual category, 126
Time (Dimension 5 of the verbal system), 336, 535–52
—difficulties of defining, 541–42
Topic, as a grammatical term avoided in this grammar, xlvii-1
Transcription of hieroglyphic writing, 22–23
Transient association between entities, 301–4
—expressed by the two verbs wnn "be" and pr followed by the preposition m, 361–62
Transitive verb
—definition, 356–57
—exhibiting voice, 525–26
—in English and in Middle Egyptian, 358–59
Transposition (or inversion) of hieroglyphs in writing, 58–59
—for honorific intent, 58–59, 270
—for layout, 59
Triliteral phonogram, 14, 15, 24, 50
—complemented by uniliteral phonograms, 42–43
—list of frequently occurring instances of the, 40
Triliteral second-doubling verb, a sound pattern class in Dimension 1 of the verbal system, 352
Triliteral strong verb, a sound pattern class in Dimension 1 of the verbal system, 352
```

```
Triliteral third-weak verb, a sound pattern class in Dimension 1 of the verbal system, 352
Tripling of ideogram, phonogram, or determinative, as a marker of the plural, 77
Type of word, 71-72
Uniliteral phonogram, 13, 14, 15, 17–25
—used as phonetic complement, 41–43
Variation in spelling, 55–56
Verb
—as a word type denoting change, 331
—as one of nine word types distinguished in this grammar, 71–72
—sharing inflection with the adjective, 369
—place in this grammar's organization, lxxvi-lxxx
Verb form
—as a word or a string of words denoting one instance of change, 331
—link with sentence type, as Archimedean point of Polotskyan theory, xxxix–xli, lxxvii
  -place in this grammar's organization, lxxvi-lxxx
Verbal coordinates. See Coordinates (of the verb)
Verbal sentence, xxxix, 67
—place in this grammar's organization, lxxvi-lxxx
Verbs for memorization, 386–87
"Virtual," as an elusive concept and tormented grammatical term, implying that something exists and does not
   exist at the same time, xxxix-xxxx, lxvii-lxviii
Voice (Dimension 6 of the verbal system), 525–33
—as a concept of verb forms of transitive verbs except the stative, 525–26
—as one of the eight dimensions of the verbal, 336
 -concept of, defined in terms of the two roles of inflection in the event, 526–28
Vowel, 17
—absent from writing, 23, 52–54, 65, 68
—as an inferred fact, xlv-xlvi
"Weak" consonant (y and w), 70-71
—as one of seven types of components in Dimension 4 of the verbal system, 448–51
—behavior and writing of, as root consonants, 351
Word
—analysis of the, as consisting of concept and sound pattern, 9–10
—as one of four basic grammatical terms in this grammar (along with sentence, clause, and phrase), 67
—structure of the sound pattern of the, 68–70
Word division, absence of, in hieroglyphic writing of, 23, 45, 68
Word order, 53, 54
—four clusters of rules about, 311–12
Word type, 71-72
"Yes," 260
```

# 3. Index of Selected Egyptian Words and Word Parts

## [References are to page numbers.]

["Alphabet": 3, j/jj/y, c, w, b, p, f, m, n, r, h, , , s, š, , k, g, t, , d, ] $\int_{i}^{\infty} jw$ , particle heading adverbial sentences and non-verbal auxiliary in verb forms, lxx–lxxiii, 225–26, -general infix in verb forms, 453–54 —question word introducing questions for corroboration ("yes-or-no" questions), 241–42 *jnjw*, question word introducing questions for corroboration ("yes-or-no" questions), 242–45  $\Delta \sum jr(y)$  "do" —interpretation of the writings —, — 44l —verb from which auxiliaries are derived, 461, 464 *jry* "thereof, their," 157, 168–69 cn w3 snb "may he live, prosper, and be healthy," common abbreviated spelling, 57 The stand," verb from which auxiliaries are derived, 461, 465 cc.n, verbal auxiliary, lxix, lxxii, 469, 487 wy, "how ...!", follows adjectives, 216  $w^c$  "one," 125–26 wnn "be," verb from which auxiliaries are derived, 461, 465, 550–51 bw, element forming abstract substantives when prefixed to adjectives, 102

```
by p3, verb from which an auxiliary is derived, 461, 464, 466
    7 p3jj.f "his," 268
       pw, member of a substantival sentence (originally a demonstrative pronoun), xxxvii, 145, 187–90,
       192, 193–94, 199, 205, 315–16, and elsewhere
     M m, preposition meaning "in"
—as component of verb forms, 452, 457, 463
 -denoting transient associations between entities, 302–4, 361–62
    m3^c rw "true of voice," common abbreviated spelling, 57
     mr "chief," common abbreviated spelling, 58
         mk, non-enclitic particle whose meaning is too weak to be translated and too strong to ignore,
       225, 228-29, 381-83, 466
    ~~~ n
 —as general infix and special infix in verb forms, 453–54, 457
 as preposition meaning "to, for," used to denote possessive relationships equivalent to English "have,"
 287-90
—as relational adjective n(y), used to connect two entities linked in the indirect genitive phrase, 91–93, 114,
 143, 145, 156, 268–69, 270–73, 274–87
 - n, negation word, 249–50, 340, 466
 n \dots js, negation word, 249–51
 nb "all, every," 108–10, 125
 nb "lord, owner," 267–68, 273
 nn, negation word, 230, 249–50, 252–54, 307–10, 466, 521–22
 nn wn "there is not," 230, 253–54, 290–91, 306, 307
    ~~~~
       \nearrow nnk, special form of the first person singular independent personal pronoun, used in possessive
       relationships, 277
    r, preposition
    —as a component of verb forms, 452, 457, 463
—as an equivalent of the comparative degree in English ("better, bigger"), 219–20
—denoting transient associations between entities, 304
```

```
r-pw "or, 115
       rd(y) "give," absence and presence of r in verb forms of, 350, 444–46, 449
    r-r "entire," 170
        -10^{\circ} "with," preposition functioning in a way similar to English "and," 114–15
      r "on," preposition
—as a component of verb forms, 452, 457, 463
—functioning in a way similar to English "and," 114–15
    r, component of verb forms
—as a general infix, 453–54, 457, 549
—as a non-verbal auxiliary, 462–63
         st, dependent pronoun referring to abstract "it," 135, 139
          k3, component of verb forms
—as a general infix, 453–54, 457, 549
—as a non-verbal auxiliary, 462–63
     \bigcirc \mathbb{N}_{\text{kjj "other," 111, 125}} 
    \triangle t, as the writing of more than one component of verb forms
—as abbreviated writing of the infix \forall ty
—as general infix, 453–54, 516, 529
—as singular substantival ending, 452, 515
—as special infix, 453–54, 516
    \ ty, sole infix followed by declension, not by conjugation, 384, 453–54
    —as a general infix, 453–54, 457, 529
    —as inflection, equivalent in meaning to English "(some)one," 129, 130
    nw "every," 111—12
```